

EXT. SARSÆ
JAM. CO.
EXT. SARSÆ
JAM. SIMP.
EXT. SARSÆ
JAM. LIQ.
DEC. SARSÆ
JAM. SIMP. 1-7.
DEC. SARSÆ
JAM. COMP. 1-7.
ALL FROM FINEST RED
JAMAICA
SARSAPARILLA ROOT
PREPARED IN VACUO BY
SPECIAL PROCESS.

FINEST SOLUBLE ESSENCES

OF LEMON, GINGER,
GINGER ALE (BELFAST),
ORANGE CHAMPAGNE,
KOLA CHAMPAGNE,
AND SEVERAL HUNDRED OTHERS.

PURE
CONCENTRATED
FRUIT ESSENCES
OF THE FINEST QUALITY
AND
HIGHEST DEGREE OF
CONCENTRATION.

STEVENSON & HOWELL'S SPECIALITIES.

STANDARD

VACUUM-PREPARED

JAMAICA SARSAPARILLA

PREPARATIONS

ESSENTIAL OILS

OF GUARANTEED PURITY

PURE ESSENCES

OF EVERY DESCRIPTION

SAMPLES, QUOTATIONS, AND FULLEST DIRECTIONS

FOR USE UPON APPLICATION.

ESSENTIAL OILS
OF GUARANTEED PURITY
AND
EXCEPTIONAL QUALITY.

ALMONDS
ANISEED
BERGAMOT
CARAWAY
CHAMOMILE
CARDAMOMS
CASCARILLA
CASSIA
CEDAR-WOOD
CINNAMON
CITRONELLA
CLOVES
CORIANDER
CUBEBS
EUCALYPTUS GLOBULUS
GERANIUM
GINGER
HOPS
JUNIPER
LAVENDER
LEMON
LIMES
NEROLI
NUTMEGS
ORANGE, SWEET
ORANGE, BITTER
OTTO OF ROSE
PATCHOULI
PEPPERMINT
PETIT-GRAIN
PIMENTO
ROSEMARY
SANDAL WOOD
SASSAFRAS
SPEARMINT
TANGERINE
THYME
WINTERGREEN
YLANG-YLANG
&c. &c. &c. &c.

STANDARD WORKS, 95^A SOUTHWARK ST., LONDON, S.E.
AND 128 HOPE STREET, GLASGOW.

VEGETABLE AND FLOWER SEEDS

OF SPECIAL MERIT.

THE "WINGED LION"

Seeds

... IN COLORED ...

Pictorial Packets.

Assorted to order.

1d. packets 6/- gross.



Pansy. King of the Blacks.

THE "WINGED LION"

Seeds

+ + in Bulk.

GROWN FROM CAREFULLY
SELECTED STOCKS.

Best quality only at lowest prices.



Eschscholtzia.

Potter & Clarke's SEEDS

FOR
CHEMISTS' GRADE.All Packets handsomely designed and
printed in colors.Make an attractive show and find a
ready sale.

Phlox Drummondii Grandiflora.

THE "WINGED LION"

Popular Collection**OF
Flower Seeds.**

CONTAINS 14 PACKETS CHOICE VARIETIES.

RETAIL AT 1S.

Put up in beautifully decorated outer.

Price, 7/- per dozen.



Nicotiana affinis.

THE "WINGED LION"

**BIRD
SEEDS.**The best value
on the market.

1d. packets 8/6 per gross.

2d. " 15/6 "

4d. " 26/- "

SAMPLES, PRICE LIST, &c., ON APPLICATION TO
5, 6, & 7 RAVEN ROW, ARTILLERY LANE, LONDON, E.

ESTABLISHED

OVER 150 YEARS.



Telegraphic Address:—

"CYRIAX LONDON."

Telephone No. 255.

Manufacturers of
PHARMACEUTICAL
PREPARATIONS

STANDARDISED
FLUID EXTRACTS

CONCENTRATED
LIQUORS FOR
TINCTURES, &c.

COMMERCIAL AND
FINE CHEMICALS

PHOTOGRAPHIC
CHEMICALS

COUNTER
REQUISITES

Sole Depot of
Dr. F. von Heyden's
SALICYLIC ACID
AND
SALICYLATES

BURGOYNE, BURBIDGES, CYRIAX & FARRIES, MANUFACTURING CHEMISTS.

PROMPT SHIPMENT GUARANTEED.

We beg to remind our friends abroad
that we are now Manufacturing for
Export, in our own Laboratories,

FREE OF DUTY,

ALL

LINIMENTS,

TINCTURES,

SPIRITS,

FLUID EXTRACTS,

INFUSIONS,

DECOCTIONS,

CONCENTRATED WATERS,

&c.

Export Prices Current Published Monthly.

Offices—12 COLEMAN STREET.

Laboratories and Warehouse—16 Coleman Street, London, E.C.

Sole Depot of
PARKE, DAVIS &
CO.'S AMERICAN
REMEDIES

DE LAIRE & CO.'S
Vanilline
Crystals
and Novelties
for Perfumers.

THE RIO
CHEMICAL CO.'S
Celerina,
Aletis Cordial,
Pinus Canadensis,
&c.

MALTO-PEPSYN

CALF LYMPH
From the British
Calf Vaccine Insti-
tution.

PEACOCK'S
BROMIDES

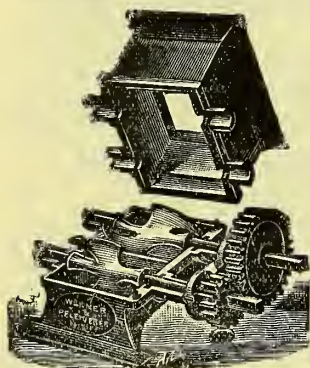
CACTINA
PILLETTS

OILS, DRY-SALTERIES, COLOURS, VARNISHES,

ALL BEST QUALITIES GUARANTEED GENUINE.
DETAILED PRICE LISTS ON APPLICATION.

J. H. BROWNING & CO.

27 Bartholomew Close, LONDON, E.C.



Size 3, Type I, for 1-lb. Mass.

THE "UNIVERSAL" KNEADING AND MIXING MACHINE

Pill Cutting, Pill Rounding, Pipers, and all other Machines for

PILL MASS MAKING,

Also for Horse Balls, Tooth Pastes, Ointments, Soaps, Powders, and for general Mixing, Incorporating, Sifting, and Straining.

REPLACES WITH ADVANTAGE ALL OTHER APPLIANCES FOR THESE PURPOSES.

Made in various sizes, to do from $\frac{1}{4}$ lb. up to 1 ton at a time.

WERNER & PFLEIDERER, 117 QUEEN VICTORIA ST., E.C.

Contractors to the War Offices of all the Great Powers and other Governments.



STRENGTH,
RAPIDITY,
AND
ACCURACY.

All other Thermometers have a contraction in the stem an inch above the bulb, and a chamber within which retains a part of the mercury. This is a defect, as it is a difficult matter to heat the mercury properly in this chamber, it being so far away from the bulb and mouth.

The "NON PLUS ULTRA" Thermometer has no chamber, and the constriction is right on top of the bulb itself.

Result—a truer temperature is taken, and in half the time; the scale is much more open

and easy to read, as the divisions and figures are so much nearer the bulb.

It has greater strength, and the price is no higher!!!

NOW READY.

And can be obtained at once of all OPTICIANS and LEADING SURGICAL HOUSES.

See Press Opinions.

THE
"NON PLUS ULTRA"

CLINICAL
THERMOMETER.

The
Superintendent
of the Royal Kew
Observatory says:—

"Their manufacture is a piece of undoubtedly high-class glass-blowing, and I also think that the removal of the contraction of the glass stem, usually placed at about half-an-inch from the bulb, will tend greatly toward extending the average life of a thermometer by increasing its strength, independently of the fact that, with the diminished bulb, much less time is required now to register a patient's temperature, and so you will be conferring a very large benefit on the medical profession by its introduction to the world."

EVERY THERMOMETER OF THIS MAKE IS GUARANTEED TO REGISTER THE TEMPERATURE IN LESS THAN TWO MINUTES.
PRICE LIST ON APPLICATION.

SOLE PATENTEE AND MANUFACTURER—

JAMES J. HICKS, 8, 9, 10 Hatton Garden, LONDON, E.C.

PERFECTION ATTAINED.

DR. C. J. COULTER'S COMBINED VAPORIZER AND INHALER.

Vocalists

AND

Elocutionists

Will find the Vaporizer of very great benefit in loss of Voice or Throat Complications.

Made of Copper and Brass, Nickel-plated. It has no Glass Tubes, and no Valves to get out of order.

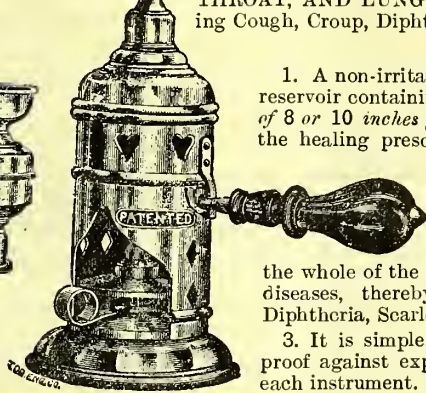
PRICE—

22/6

With
Perfumer
and
Deodorizer
Attachment.



TRADE MARK



THE CHAMPION VOLATILIZER.

A NEW CANADIAN INVENTION.
A New Instrument for Vaporizing Oils and Drugs for Inhalation,
and for **DISINFECTING AND DEODORIZING SICK ROOMS,**

Hospitals, Public Buildings, Railway Carriages, &c., also for Perfuming
Parlours, Churches, Opera Houses, &c.

Excels all other Inhalers, as it reduces Drugs and Oils to vapour, in which condition only can they reach the cavities and air passages to be medicated, thus acting directly in the treatment of **DISEASES OF THE NOSE, THROAT, AND LUNGS,** such as Consumption, Bronchitis, Asthma, Whooping Cough, Croup, Diphtheria, Catarrh, Hay Fever, and Influenza.

ADVANTAGES.

1. A non-irritating, thoroughly medicated vapour is obtained; the reservoir containing the medicated sponge being placed at a distance of 8 or 10 inches from the boiling water, and complete volatilization of the healing prescription to be inhaled is effected, thus insuring its reaching directly the part affected. Other so-called vaporizers are only atomizers, breaking the medicine into fluid particles, which are not diffusible, and are too heavy to be inspired.

2. By vaporizing antiseptics, it quickly sterilizes the whole of the atmosphere of a room or building in cases of infectious diseases, thereby abolishing the danger of infection in cases of Diphtheria, Scarlet Fever, Cholera, Measles, &c., &c.

3. It is simple, durable, convenient of manipulation, and absolutely proof against explosion or fire, as a perfect safety-lamp accompanies each instrument.

It is the only volatilizer that is unanimously endorsed and recommended by medical men, sanitarians, and chemists, amongst whom are the following:

- W. B. GEIKIE, M.D., C.R., D.C.L., Fellow Royal College of Surgeons Edinburgh, L.R.C.P. London; Dean of Trinity Medical College, Toronto.
- H. C. WOOD, M.D., L.L.D., Professor of Materia Medica and Therapeutics, and Clinical Professor of Diseases of the Nervous System in the University of Pennsylvania.
- G. STERLING RYERSON, M.D., C.M., L.R.C.S. Edinburgh; Professor of Ophthalmology and Otology, Trinity Medical College, Toronto.
- N. A. POWELL, M.D., Lecturer on Surgical Appliances and Demonstrator of Anatomy, Trinity Medical College; also Lecturer on Practice of Surgery, Woman's Medical College, Toronto.
- WM. PORTER, M.D., Professor of Diseases of the Chest, Laryngology, and Clinical Medicine, St. Louis College of Physicians and Surgeons, Consulting Physician to the Throat and Chest Department of the City Hospital, &c.
- C. O'REILLY, M.D., Medical Superintendent Toronto General Hospital.
- G. R. McDONAGH, M.D., L.R.C.P. London, Instructor of Laryngology and Rhinology, University of Toronto.
- CHARLES DENISON, M.D., Professor of Diseases of the Chest and Climatology, University of Denver, Colorado.
- FREDERICK W. STRANGE, M.R.C.S., England, Toronto.
- SIR JAMES GRANT, M.D., Ottawa.
- F. LYDSTON NEWMAN, M.D., Lecturer Materia Medica, Detroit College of Medicine.
- CYPRUS EDSON, M.D., President of the Board of Pharmacy, City and County of New York.
- NORMAN ALLEN, M.D., C.M., M.R.C.S. England, Medical Health Officer, Toronto.
- C. P. AVISON, M.D., Demonstrator of Materia Medica and Pharmacy, Medical Faculty of Toronto University, Professor of Materia Medica and Botany, Ontario College of Pharmacy.
- J. T. FOTHERINGHAM, M.B., M.D., C.M., Professor of Microscopy and Materia Medica Ontario College of Pharmacy, Toronto.
- CHAS. B. HEEBNER, Ph.G., Professor of Pharmacy and Director of the Pharmacal Laboratory, Ontario College of Pharmacy, Toronto. Formerly Instructor of Pharmacy at the College of Pharmacy of the City of New York.
- MOREAU R. BROWN, M.D., Lecturer on Laryngology and Rhinology, Chicago Polyclinic.
- EISEN BOCKIUS, M.S., M.D., L.L.B., late Professor of Medical Law, College of Physicians and Surgeons, Chicago
- By order of the Surgeon-General of the United States Army, Dr. Coulter's Combined Vaporizers are in use in the United States Army Post Hospitals. With each Instrument fifteen of Dr. Coulter's Vaporizing Remedies in Phthisis, Influenza, Catarrh, Whooping Cough, Croup, Diphtheria, Sore Throat, Bronchitis, Asthma, Quinsy, Hay Fever, Pneumonia, Typhoid Fever, &c., &c.

Descriptive Pamphlet with Testimonials on application. May be obtained from any of the leading Druggists and Surgical Instrument Makers, from Marshall & Co., 217 Buchanan Street, Glasgow, or direct from

THE COULTER VAPORIZER CO., LTD., 24 Charing Cross, Whitehall, LONDON.

"CONCILIO ET LABORE"

**THE MANCHESTER COLLEGE
OF PHARMACY.**

Directors, Messrs. W. S. & C. TURNER.

The next Course of the Full-time Classes for the Minor and the Major will begin on March 27.

IN THE PRESS:

**A MANUAL OF ORGANIC CHEMISTRY FOR THE
USE OF PHARMACEUTICAL STUDENTS,**

By CHARLES TURNER, F.C.S.

Part I., complete in itself, will be ready about March 14. Price 1s., or by post, 1s. 2d.

The chief subjects treated of are—Ultimate Organic Analysis; Victor Meyer's Process for Determining Vapour Densities, with Examples and Calculations of Formulae; Methane and its Derivatives; Chloroform, &c.; Ethane, Alcohol, Ether, Ethyl Chloride, Nitrite, &c.; Aldehyde, Paraldehyde, Chloral; Amyl Alcohol and its Derivatives; Nitrite of Amyl; Valerianic Acid and its Isomers; Isomerism of the Paraffins, Alcohols, Acids, &c., &c.

Now Ready.

Medium 24mo.

THE EXTRA PHARMACOPŒIA:

Seventh Edition.

7s. 6d.

With Medical References and a Therapeutic Index of Diseases and Symptoms.

By WILLIAM MARTINDALE, F.C.S., and W. WYNN WESTCOTT, M.B., LOND.

"The new edition is in every respect as reliable as before, and it contains useful references to all newer remedies, indicating not only the most convenient way in which they may be employed, but also the results which have been given in various forms of disease in the hands of different observers."—*The Lancet*, Jan. 7, 1893.

"The Pharmacopœia (British) practically superseded by such books as Martindale. . . . A real book of reference."—*Edinburgh Discussion on Pharmacopœia revision*, *Pharmaceutical Journal*, Dec. 31, 1892.

LONDON: H. K. LEWIS, 136 GOWER STREET, W.C.

**LONDON HOMŒOPATHIC HOSPITAL AND MEDICAL
SCHOOL, GREAT ORMOND STREET, BLOOMSBURY, W.C.**

President—THE LORD EMBURY.

Contains 90 Beds, and being entirely supported by Voluntary Contributions, Donations and Annual Subscriptions are earnestly solicited. The Hospital is always open to the inspection of visitors, and Clinical Instruction is given in the Wards and Out-patient Department to Medical Students and Practitioners. It possesses a valuable Library of Homœopathic Publications, which Medical Men are invited to study. They are also invited to visit the Dispensary. The in-patients number over 700 annually; the Out-patients nearly 9,000 annually. The number of Patients treated since the inauguration in 1849 exceeds 215,000. It has a staff of 42 Nurses for Ward Nursing and Nursing Invalids at their residences.

G. A. CROSS, Secretary-Superintendent.

NOW READY, SECOND EDITION, CROWN 8vo, PRICE 6s.

A PRACTICAL MANUAL OF

VENEREAL & GENERATIVE DISEASES

Including SPERMATORRHEA, PROSTATORRHEA, IMPOTENCE, and STERILITY in Both Sexes.

By M. K. HARGREAVES, M.D.

Assistant Physician to St. John's Hospital for Diseases of the Skin.

LONDON: R. KIMPTON, 128 WARDOUR STREET, LONDON, W.O.

THE CHEMISTS', DRUGGISTS', AND ALLIED TRADES EXHIBITION

TO BE HELD APRIL 22, 24, 25, 26, 27, 28, 29, 30, 1893,

AT THE ROYAL AGRICULTURAL HALL, LONDON, N.

Immediate Application for Space is necessary from those Firms desiring Special Positions.

Full particulars, and Plan of the Hall, on application to JOHN BLACK (Sec.), Exhibition Offices, 2 Newcastle Street, Strand, W.O., London.

GEORGE TREBLE & CO.

SHOP FITTERS & SHOW-CASE MAKERS,

Chemists waited upon in any part of the United Kingdom. Plans and Estimates supplied free of charge.

59 RHODES STREET HOLLOWAY. LONDON, N.

PHILIP JOSEPHS, 54, 68, and 93 LONDON, E.C.

OLD ST., GOSWELL RD.,

Has always in Stock a large assortment of Second-hand and New Drawers, Counters, Dispensing Screens, Glass Wall and Counter Cases, and every requisite for Fitting-up a Shop within 24 hours at prices less than any other house.

Inspection invited.

CLOSED ON SATURDAYS.

THE 'BILTOR' PATENT HEALTH PIPE, 14 HOLBORN, LONDON, E.C.



AS IT WAS.

The "BILTOR" system of Tobacco Smoking is to the old method as great an advance respecting the benefit of public health as Electricity is on Gas.

As a health pipe there is nothing like it. On this ground we feel justified in making our earnest appeal to Chemists to co-operate with us in introducing this great and pleasing novelty.

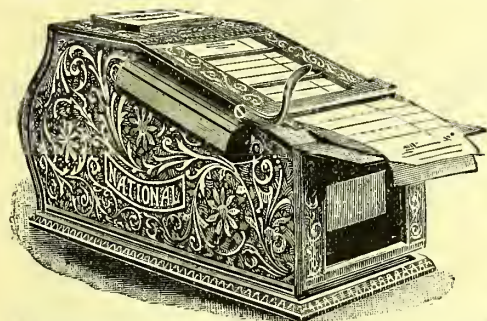
We will shortly issue Cartridges as a preventive of Influenza and Cholera, Anti-Asthmatic, Cartridges for Hay Fever, also deliciously perfumed ones.

Pipes, Cigar and Cigarette Holders, in all shapes, qualities, and prices, from 1/- upwards. Ordinary Cartridges (flexible), in boxes of 50, for 6d.



AS IT IS.

A GOOD SELLING ARTICLE. AGENTS WANTED IN EVERY TOWN. CORRESPONDENCE INVITED.



SPECIALLY ADAPTED FOR
CHEMISTS' AND DRUGGISTS' COUNTERS.

THE AUTOGRAPHIC CASH REGISTER.

Specially adapted to the requirements of every Retail Chemist and Druggist. The "Autographic" supplies **THREE INFALLIBLE RECORDS** of each sale made by the assistant, and all from the one entry.

Price, all complete - £6 10s.

Manufacturers and Patentees: **THE NATIONAL CASH REGISTER TILL CO.**

London Office and Showrooms: 356 STRAND, W.C.

J. W. ALLINSON, SOLE IMPORTER.

**SILVERLOCK'S
POSTAL ORDER
RECORD BOOK.**
WITH PRINTED HEADINGS.
Size 8 x 5, bound in cloth.
Price 1/6, Post free.

SAMPLES
FREE BY POST.

SILVERLOCK'S
CHEMISTS' SLIP LABELS
From 1/ per 1000; a reduction on large quantities.

CHEMISTS' COUNTER BILLS
Good Quality, 7½ x 5 .. 10,000, 15/ | Second Quality, 7½ x 5 .. 10,000, 12/6
" 9 x 5½ .. 10,000, 22/6 | " 9 x 5½ .. 10,000, 18/

CHEMISTS' PILL LABELS
From 1/3 per 1000; a reduction on large quantities.

COPPER-PLATES FOR SLIP AND DISPENSING LABELS
ENGRAVED FREE OF CHARGE.

Labels of every description, Price Lists,
Illustrated Trade Catalogues, Prospectuses,
Pamphlets, Show Cards, &c.

♦ ♦ ♦
H. SILVERLOCK,
Medical Label & General Printer,
92, BLACKFRIARS ROAD, LONDON, S.E.

**THE
CLINICAL CLERKS'
GUIDE TO URINE TESTING**
On 3-fold linen-lined card,
9 in. by 5 in.
Price 7d., Post free.

SAMPLES
Free by Post.

SAMPLES
Free by Post.

**JOHNSON'S
COMPENDIUM
FORM,**
For Entering Trade Receipts and Expenses.
(Specially adapted for Chemists.)
Eleventh Edition Revised, price 3/6.
Of for Three Years with a three
bound in one volume,
price 10/6.

**WHOLESALE
AND RETAIL
DRUGGISTS' PRICE BOOK**
BY D. ELIOTT.
New Edition: Revised according to
the latest Edition of the British Pharmacopoeia 1890. Pocket size, bound
in leather, price 3/.
This Edition can be used
as a Telegraphic Code
if required.

THERMOMETERS.

2 each, 6d., 1/-, and 1/6 on Card, Fig. 282. Per Card, 4/-

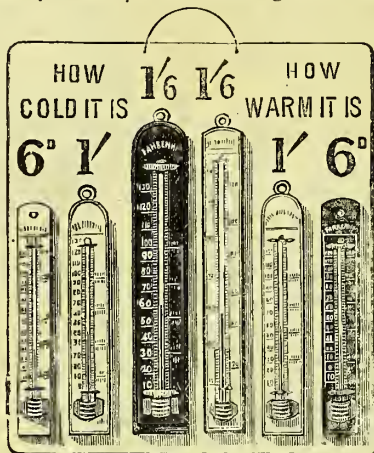


FIG. 282.

Splendid 6d. line: viz., 1 doz. 7 inch assorted colour Thermometers, Yellow, White, Black, and Brown, with enamelled tubes, on Gold Blocked Show Card to hang up. Per Card, 4/-

Wood Bath Thermometers, Small, 7/-; Large, 10/- per doz. Clinical Thermometers, from 24/- per doz.

FRANCIS NEWBERY & SONS,

Druggists' Sundriesmen,
1 and 3 King Edward Street, Newgate Street, LONDON, E.C.
ESTABLISHED 1746.

ONE BY ONE!

PASCALL'S SILVER CACHOUS
BRILLIANTLY POLISHED.
FRAGRANT AROMA.
FINEST IN THE MARKET.

IN ROUND PATENT BOXES, MADE TO RELEASE ONE BY ONE.

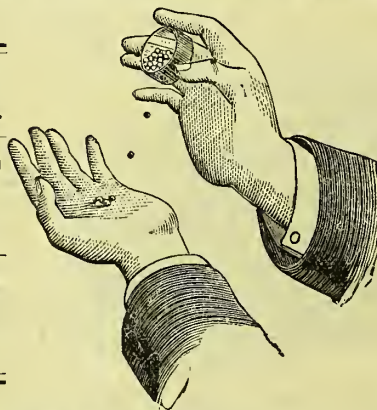
QUITE
NOVEL

PREFERRED
TO ALL
OTHERS.

In 1 dozen

Outer

Boxes.



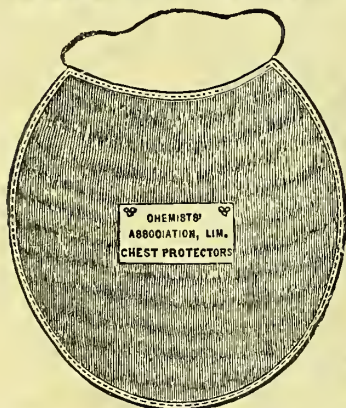
Most
Saleable

2/3
per dozen.
In
1-lb. Bottles
3/6
per lb.

Of the usual Wholesale Houses, and of the Manufacturer,

JAS. PASCALL, Blackfriars Rd., LONDON, S.E.

CHEST PROTECTORS & RESPIRATORS.



CHEST PROTECTORS.

FELT (Scarlet)— No. 0	1	2	3	4	5	6
Single	5/- 6/3	7/3	9/-	11/6	15/-	20/- doz.
Double	11/6 14/-	18/-	22/-	26/6	35/-	44/- "
"The Eclipse" (Vest Shape) }	17/6	23/6	31/6	39/-	48/-	56/- "

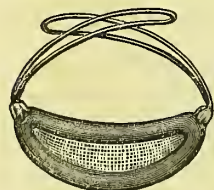
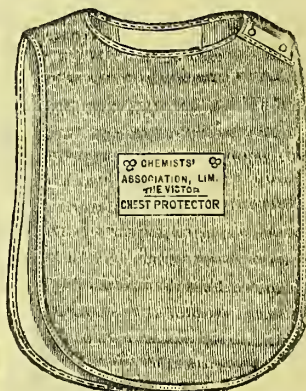
NATURAL WOOL—						
Single	5/6 6/9	8/6	10/-	12/6	16/6	22/- "
Double	12/6 15/6	20/-	24/-	29/-	39/-	48/6 "
"The Eclipse" (Vest Shape) }	19/3	26/-	34/6	43/-	53/-	62/- "

CHAMOIS & FLANNEL—						
Single	5/3 8/2	11/-	12/10	15/3	19/-	— "
Double	19/-	23/9	29/6	36/-	46/-	— "
"The Eclipse" (Vest Shape) }	26/-	35/-	47/-	58/-	72/-	84/- "

SAMPLES ON APPLICATION.

Subject to Special Discounts as under:—

X	5 per cent. on orders of less than £5 worth.	X
10	" " " £10 worth and upwards.	
15	" " " £25 " " "	
20	" " " £50 " " "	



RESPIRATORS (Non-corrodible Metallic).

LADIES' OR GENTLEMEN'S (as Illustration.)

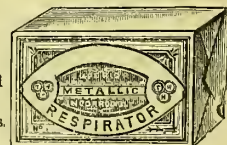
No.	1	2	3	4	5	6	7	8	9
Per doz.	7/6	11/6	13/3	19/-	22/-	28/-	42/-	47/-	53/-

All other kinds kept in Stock.

N.B.—A Mahogany Glass Show Case presented with first orders of not less than £2 assorted

Subject to Discounts as under:—

5 per cent. for orders of less than £2 worth.	12½ per cent. for orders of £10 worth & upwards.
10 " " " £5 worth & upwards.	15 " " " £25 " " "
20 per cent. for orders of £50 worth and upwards.	

**THE CHEMISTS' ASSOCIATION, LIMITED,****CURTAIN ROAD, LONDON.**Telegraphic Address—
"BEATROP LONDON."Telephone No.
11,391.

DARTON'S IMPROVED CLINICAL THERMOMETER.**REDUCED
PRICES.**

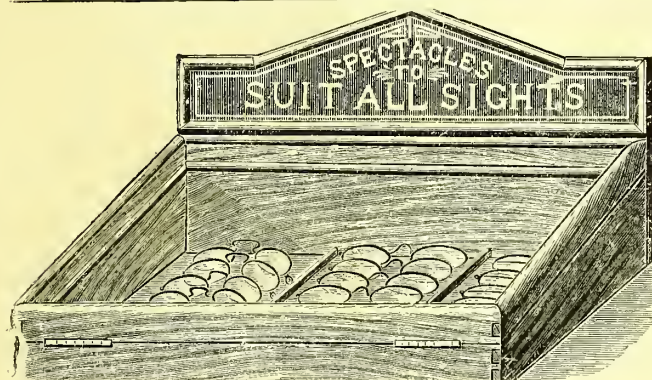
Fig. 1.

Fig. 2.

Fig. 3.

Hospital Pattern, in German Silver Cases	...	...	...	...	...	...	...	...	18/	per dozen
Standard do., Fig. 3	"	or Vulcanite	...	...	...	...	...	...	21/	"
Lens Magnifying Front, Hospital Pattern, Fig. 1, in German Silver Cases or Vulcanite	...	...	...	...	...	...	...	...	30/	"
Do., rapid action, by which readings can be taken in as short a time as 30 seconds, Fig. 2	...	...	...	...	...	...	...	...	42/	"
Kew Certificates	...	...	...	...	...	...	...	...	12/	doz. extra.

We beg to caution our clients against buying spurious imitations of our well-known goods.

**DARTON'S
SHOW CASES OF SPECTACLES.**

Chemists commencing the Spectacle business will find these Show Cases arranged with an assortment of Spectacles and Folders of all sights, to meet the requirements of purchasers. The quality and quantity may be varied to suit any class of trade at customer's wish. Case is of Solid Polished Mahogany, well made and finished, to stand any climate. A large Coloured Show Card is sent with each case, and instructions for testing sights, with table of Nos., and together with Sight Tester, £2 2s.; do., with assortment of Folders and Test Types, £3 3s.; Large-sized Case, with more complete assortment, £6 6s.; do., with assortment of Pebble Spectacles, £10 10s.; Large-sized do., £21.

The following Trade Lists now ready: "Spectacles and General Optics," "Meteorological Instruments," "Electric Bells, Medical Batteries, &c.," mailed Free to any part of the World.

F. DARTON & CO., (Makers to H.M. Government) Clerkenwell Optical Works, 142 ST. JOHN STREET, LONDON, E.C.

FALLOWFIELD'S PHOTOGRAPHIC ANNUAL, 1892-3,

1/- 592 PAGES. 806 ILLUSTRATIONS. 1/-

(FREE TO CHEMISTS ONLY).

SPECIAL DISCOUNTS TO CHEMISTS.



"FACILE" HAND CAMERA,

£3 13s. 6d. and £5 5s.

"FALLOWFIELD" HAND CAMERA

£7 17s. 6d.

PERFECTION of ELEGANCE and WORKMANSHIP.

Fullest Particulars in 24-page Illustrated Pamphlet (Post Free)



JONATHAN FALLOWFIELD,

CENTRAL PHOTOGRAPHIC STORES,

146 CHARING CROSS RD., LONDON.

EXCHANGE COLUMN.**FOR DISPOSAL.****Literature.**

Nine volumes of *The Chemist and Druggist*, newly bound, for 40s. Bates, Wellington, Salop.

Unbound volumes of *Chemist and Druggist*, years 1874 to 1892, few numbers missing; what offers? Particulars, Marriott & Co., Hastings.

Chemist and Druggist, clean and complete with Diaries, 1890, '91, '92, 15s.; *Pharmaceutical Journal*, last 6 years, 5s. Macdonald, Chemist, Newington, Edinburgh.

Drugs and Chemicals.

Surplus goods.—23 lbs. fine gum sorts; 8 lb. 8 oz. ol. cinnamon, ver., 2s. 6d. oz.; 1 lb. iodoform pulv., 14s.; 4 lbs. opium ture., 7s. 9d. per lb "Drugs," Lingdale, Skelton, Cleveland.

10 lbs. pure aniline; 10 galls. pure benzene; 8 lbs. benzyl chlorid.; 4 lbs. acetonitrile; 1 lb. acrylic chlorid.; 3 lbs. ethylene bromide; 1½ lb. acetone; 1 lb. acetophenone; samples sent. 127/21, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Educational.

Materia medica cabinet, 18s. 6d.; microscope, 7s. 6d.; Latin dictionary, new, 3s.; "London Hospital Pharmacopoeia," 2s.; Martindale's, 2s. 6d.; Bowman's "Chemistry," 1s.; Buckmaster's, 1s.; Fownes', 1s. 9d.; Casar, 1s. W. G. B., 25 Lower William Street, St. John's Wood.

Library surplus:—"Pharmacographia," 10s.; Blyth's "Foods: Composition and Analysis," new, 10s.; Remington's "Pharmacy," new 12s. 6d.; Ormerod's "Injurious Insects," 3s.; Davis's "Mounting Microscopic Objects" and Lankester's "Half-hours with Microscope," 3s. the two; Wanklyn's "Water Analysis," 3s.; Frankland's "Agricultural Chemistry," new, 4s. 6d. Wyatt, Lancaster.

Beasley's "Pocket Formulary," 4s.; Beasley's "Druggist's Receipt-book," 4s.; Squire's "Companion," 3s. 6d., 5s., 6s. 6d. and 7s. 6d.; Pereira's "Materia Medica," 3 vols., 24s.; Atfield's "Chemistry," 7s. 6d.; Turner's "Chemistry," 15s.; Muspratt's "Chemistry," 2 large vols., 30s.; Taylor on "Poisons," 5s.; Hooper's "Medical Dictionary," 15s.; Cooley's "Cyclotradia," 15s. Russell, Chemist, Windsor.

Formulae.

For sale, 130 well-tried recipes, neatly copied in book, post, 1s. 6d. Tully, Chemist, Hastings.

Shop Fittings.

Handsome specie-jar, with stand, in good condition, glass cover, terra cotta and silver, height 2 ft. 6 ins. "Chemist," 137 Lewisham High Road, S.E.

Dispensing-counter case (without lettering), as Maw's A55, 47. 10s. Earbour, 88 West Cromwell Road, S.W.

Job lines.—Shop-rounds, good quality, 12 dozen assorted, 6 oz. to 4c-oz., gold-labelled, 57s.; syrups, 9s. and 12s.; ointment-jars, 6s., 9s., 12s. Natali, 40 Gray's Inn Road, London.

Carboys, 2 16-gall. cnt stoppers, 70s. the pair: 2 12-gall., 65s. the pair; 3 6-gall., 70s.; also a lot of shop-rounds, pink ointment-jars, equal to new. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Twenty black store-bottles, 2-gallon, gold-labelled, in good condition; 2 caboys, 6-gallon, cnt stoppers; bent plate-glass counter, 3 ft. long; 20 and 30 oz. wide and narrow mouth shop-rounds. P. A. Stevens, 72 Mansfield Road, N.W.

Shop-fittings, secondhand, in first-class condition.—12 ft. run of mahogany-fronted drawers, with glass labels and glass knobs, lockers, shelving, and cornice, complete, 147. 10s.; plate-glass fronted counter, 12 ft. long, 107.; dispensing-screen, mirror centre, 6 ft. long, 67. 10s.; desk, with glass case and mirror back 55s. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Miscellaneous.

One gross good strengthening porous plasters, 15s., sample 27. "Chemist," 93 Kingston Road, Wimbledon.

Six dozen Imperial fire-grenades; what offers? 43/41, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Copper still (for fire), capacity 60 galls, 251/42, Office of THE CHEMIST AND DRUGGIST 42 Cannon Street, E.C.

Half-plate camera, best make, rack and pinion adjustment, double swing back, rising and sliding front, best leather bellows, 2 double dark slides; exchange for sponge-case, same as Maw's (fig. 3). Curtis, High Road, Chiswick.

Five-gallon pear-shaped carboy, 10s.; Dobson's quarter-ill drinks, half wholesale price; Fly Cemeteries, cheap. Rookledge, Easingwold.

20 gross 1d. pictorial flower-seeds on ½-gross cards; this season's guaranteed; overstocked; 5s. 6d. gross free; sample 12, 7d. White, Chemist, Ibstock.

A small French soda-water machine, complete with syphon and bottle filler; will fill 2 dozen syphons or 6 dozen bottles each charge; 137., cost 307. Cocks, Pharmacist, Torquay.

25 lbs. tinct. ferri. perchlor.; 28 lbs. liq. ferri-perchlor. fort.; 15 lbs. tinct. cantharides; 31 lbs. tinct. nux-vom.; 18 lbs. ether. chlor. opt.; 24 lbs. acid. phosph. dil.; 5 lbs. collodium flexile meth.; all nice, clean, and fresh; will take low prices to clear the lot, which must be sold immediately; also 3. grain pill machine, second-hand, by Maw. "Drugs," 65 Darnley Road, Gravesend.

One lb. pulv. opii Tky. opt.; 1½ lb. pulv. ipecac.; 12 oz. ammon. iod.; 8 oz. ol. amygd. essent. sine acid.; 5 oz. argent. oxyd.; 1½ gall. ess. rennet conc.; 2 pints delightful triple perfume; 2-dr. pessary-mould (6); pill-machine 5-gr., 24 pills; *Year-book Pharmacy, 1872-73*, *Chemist and Druggist, 1890-1*; what offers? 127 23, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED.

Pill-machine; large Wedgewood mortar; plaster spreader. Norman, Audley, Staffs.

A human skeleton, articulated, complete and in good condition. Apply, J. Jordan, Secretary Municipal Schools of Science and Art, Barnstable.

Copies of *The Chemist and Druggist* for January 14, 1893; 3d. each offered by the Publisher, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street E.C.

The Chemist and Druggist for July 3 and 24, 1886; January 1, March 5, and August 20, 1887; Feb. 4 and 25, Oct. 6, and December 29, 1888; January 12, 1889; March 1, Aug. 9, Sep. 20, 1890; March 31, 1891. State price to S. B., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Address Wanted.

Present address of C. Wyndham Rickford, Esq. (late of Kensington), will oblige. Sharpe & Son, 34 High Street, Notting Hill, London.

MERCHANT SHIPPERS' ISSUE**THE CHEMIST AND DRUGGIST of March 18**

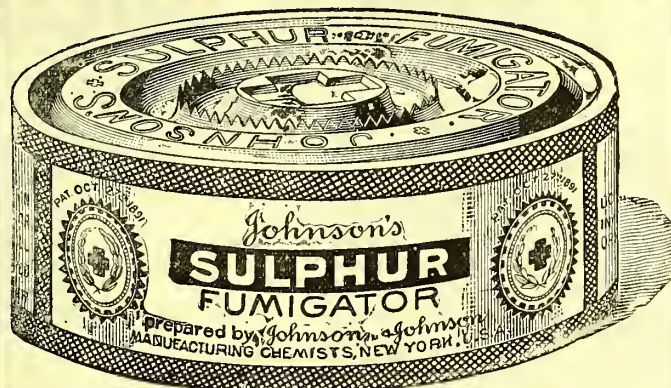
Will be specially circulated to the Merchant Shippers of the United Kingdom.

This circulation will be in addition to that obtaining from week to week. Merchant Shippers are the best buyers of Druggists' articles. They are the people who place goods on Colonial and Foreign Markets, and to secure their influence and support for advertisers in THE CHEMIST AND DRUGGIST is the object of the issue.

SECURE SPACE EARLY BY APPLICATION TO

THE PUBLISHER OF "THE CHEMIST AND DRUGGIST,"
42 CANNON STREET, LONDON, E.C.

JOHNSON'S SULPHUR FUMIGATOR.



Patent No. 18,434
of 1891.

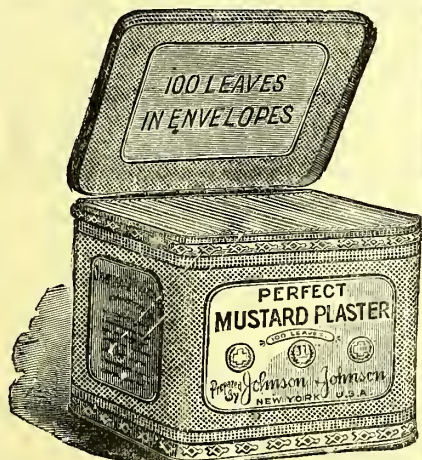
Patent No. 18,434
of 1891.

FOR FUMIGATING INFECTED ROOMS AFTER

Cholera, Diphtheria, Typhoid Fever, Smallpox, Scarlet Fever, & other Contagious Diseases.

Destroys noxious vapours from sewers, &c. By the use of these Fumigators a safe and convenient mode of burning sulphur indoors is provided. One Fumigator will burn two hours, and is sufficient for an ordinary sized room.

JOHNSON'S FUMIGATOR is put up in a specially prepared FIREPROOF BOX, and will not burn nor become red hot like tin or other metal packages. Packed in neat Show Boxes with folding covers. A showy Counter Article. Retail price, 1/.



100 leaves in tin box, price 5s.

**IF YOU TRY THEM
YOU WILL BUY THEM!**

A. Test and Comparison will show that the Mustard Plasters prepared by **JOHNSON & JOHNSON** are of greater strength and generally superior to others. They do not decompose nor change with age. They are packed in very handsome containers, in packages to retail at from **1d.** to **1/6** each.

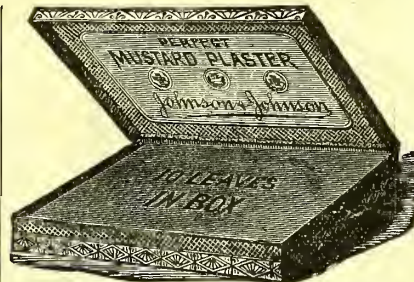
THEY ARE THE MOST PROFITABLE

To all concerned in Mustard Plasters because they are the best made

TRADE PRICE LIST OF JOHNSON & JOHNSON'S IMPROVED MUSTARD PLASTERS

	On Paper	On Cloth	Retail price
3 leaves in round tin box, per dozen	2/9	3/-	/6 each
6 " " " " " " "	5/-	5/6	1/- "
10 " flat " " " " "	7/-	8/6	1/6 "
100 " one in envelope, in tin box, per box	5/-	6/-	1½ "
Yard rolls, 6 in. wide, per dozen	7/-	8/6	1/6 "
Half-yard rolls, 6 in. wide, per dozen	5/6	6/-	1/- "

Sample Mustard Leaf mailed to any chemist's address, without charge, on application: or on receipt of 8d. in stamps, 1 box 10 leaves paper (see cnt.) and 1 box 3 leaves cloth, retail for 2/-



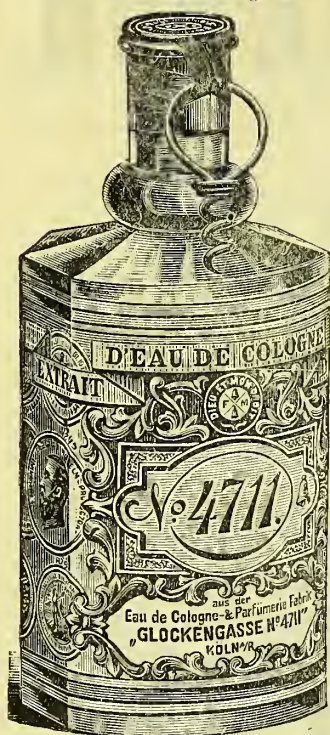
10 leaves in flat tin box, at 7/- per dozen boxes.

In ordering from the Wholesale Trade specify **JOHNSON & JOHNSON.**

TRADE LISTS ON APPLICATION TO

JOHNSON & JOHNSON, LTD., 12^A LONG LANE, E.C.

THE ORIGINAL. **No. 4711 (MULHENS',)** BRAND
Late Farina's
OF
EAU DE COLOGNE



The Gentlewoman writes as follows:—"Those of us who are connoisseurs in this matter of perfume know how greatly the various so-called Eaux de Cologne vary, and are well acquainted with the superiority of the '4711' make over all others. This possesses an unequalled degree of refreshing fragrance, is at the same time both stronger and more delicate, and is not only better, but more lasting than others."

Young Ladies' Journal:—"Its pure, fresh scent never palls as is the case with many perfumes."

The World says:—"Anyone desirous of getting a thoroughly genuine Cologne cannot do better than send for a bottle of the '4711' double extract. Once having used it, repetition is a foregone conclusion."

Lacy's Pic'orial says:—"Its quality is absolutely the best, while for purity and lasting effects it has no rival. . . . We can most cordially advise all our readers to make a point of obtaining the No. '4711' brand."

Truth finds it "really deliciously sweet."

OF ALL WHOLESALE FIRMS IN THE U.K.

Do not omit to mention the "No. 4711," and the Blue and Gold Printed Label, which commands a higher Retail Price than any other Brand whatever.

LONDON BRANCH:—62 NEW BOND ST., W.

Wholesale, Export, and Retail—R. J. REUTER, Manager.

SALE! SALE! SALE!

We are removing to more convenient premises on March 25, and, to reduce our Stock as much as possible prior to removal, we are now offering same at lower figures all round, and in the case of Fancy Goods, Sundries, &c., at a very large discount for cash. It will be worth your while to call or write.

G. VOGT & CO., Wholesale and Export Druggists and Perfumers,
28 WILSON STREET, LONDON, E.C.

Telegrams—"ALSACE LONDON."

PRICE LISTS FREE.

SOZIO & ANDRIOLI

ESTABLISHED A.D. 1757.]

GRASSE (Alpes Maritimes), FRANCE.

Neroly, Lavender, Geranium, Orris, Patchouly, Thyme, Rosemary, Spike, Santal, &c.

CONCENTRATED PERFUMES.

CONCRETE ESSENTIAL OILS.

FLOWER POMADES at the highest possible Saturation. ROSE & ORANGE FLOWER WATER, Sweet Almond Oil.

London Agent—MR. FREDK. BOEHM, 4 CULLUM ST., E.C.

STOCK KEPT IN LONDON

STOCK KEPT IN LONDON

IMPORTANT NOTICE

TO CHEMISTS AND DRUGGISTS.

Messrs. A. ROWLAND & SONS, Proprietors of Rowland's Macassar Oil, Kalydor, and Odonto, have had designed for them a new and beautifully-coloured

SHOW-CARD



after the style of the illustration in this advertisement, and will be glad to send one to any Chemist or Druggist, Free of Cost, who will send his Name and Address, or if residing out of England, the address of any wholesale house to whom it may be sent for enclosure. Also Dummies of all three articles, to save the real articles from being soiled by exposure in the window or show-case. These cards are of the same design as those sent out in May, June, and October, 1892, so those Chemists who have already had one will probably not require another.

A. ROWLAND & SONS, 20 HATTON GARDEN, LONDON.

GENUINE EAU DE COLOGNE.

JOHANN MARIA FARINA, Gegenüber dem Laurenz Platz,
Has the second largest sale amongst Chemists in the United Kingdom.

2 oz.	4 oz.	$\frac{1}{2}$ Pint Wicker.	Pint Wicker.	Quart Wicker.
7/6	14/-	21/-	42/-	84/- per doz.

Sole Agents—OSCAR MOENICH & CO., 8 Coleman Street, LONDON, E.C.

BORAX & CAMPHOR SOAP.

(DODD'S PATENT.)

DODD BROS. desire to draw the attention of the trade to their Borax and Camphor Soap, the demand for which is being rapidly created, and it finds a ready sale wherever introduced. It is specially adapted for washing the Hair, and is invaluable for the Skin, Bath, and Toilet. It is packed in handsome carton cases, and retails at 6d. One-dozen box makes an attractive show.

Artistic Showcards and Handbills on application to any Wholesale House, or to DODD BROS., Stamford Hill, London, N.

SOLD BY THE FOLLOWING WHOLESALE AGENTS:—

London—Barclay & Sons, W. Edwards & Son, R. Hovenden & Sons, Lynch & Co., S. Maw, Son & Thompson, May, Roberts & Co., F. Newbery & Sons, J. Sanger & Sons, Shirley Bros., W. Sutton & Co.
Belfast—Clark & Co., McMullan & Co.
Birmingham—Southall Bros. & Barclay

Bristol—Ferris & Co., A. & J. Warren.
Cork—Kiloh & Co. (Limited).
Dublin—Hayes & Co., McMaster, Hodgson & Co.
Edinburgh—Duncan, Flockhart & Co., Raimes, Clark & Co.
Glasgow—Apothecaries' Co.
Leeds—Goodall, Backhouse & Co.

Liverpool—Evans, Sons & Co., John Thompson.
Manchester—Oldfield, Pattinson & Co., J. Woolley, Sons & Co.
Norwich—Smith & Sons.
Nottingham—J. H. Haywood & Sons.
York—Bleasdale & Co., Folkard & Co., Raimes & Co.



"QUEEN of the MEADOW"

**PERFUME
CACHOUS
SOAP
TOOTH SOAP
TOOTH POWDER**

Are the most Saleable Preparations of their kind
in the Market.

They do not bear maker's name, and are largely sold by Chemists as their
own Proprietaries.

If you have not seen them, write for samples and prices.
Their unique quality and finish make trade, for, after all, it is inherent
merit which leads to continued prosperity in the business pharmacutic.

WILLIAM BLEASDALE & CO., YORK.

HOMŒOPATHIC
First
Established

Homœopathic Chemists.

JAMES EPPS & CO

48 Threadneedle Street,

London,

Eng.

MEDICINES

JOSEPH WATSON & SONS,

MANUFACTURERS OF

GLYCERINE

DOUBLE DISTILLED CHEMICALLY PURE, 1260 Sp.G.,

ALSO FOR

NITRO-GLYCERINE AND OTHER MANUFACTURING PURPOSES.

PACKED IN 10 AND 5 CWT. IRON DRUMS, TO BE RETURNED, AND IN 56 LBS. TINS FREE.

WHITEHALL SOAP WORKS, LEEDS.

"SPECIALITIES" OF WIDE REPUTATION

Suitably Packed for Home and Export, in various Languages, for all Markets.

'COAGULINE' The Cement for all Broken Articles. 'LAVA' A fusible impermeable CEMENT. GLASS TUBE For Filling Bottles. ABSORBENT COTTON WOOL. CUE CEMENT, Cue Tips, Wafers, FIXERS, CHALKS, &c. LINSEED, Chloro-Linseed and Throat Lozenges, Jujubes, &c.	COMPOUND ESSENCE OF LINSEED, NYMEL SILLÆ (exceptionally brilliant) Dec. Senega Concoct. PHOSPHORIC ACID. GLYCERINE. Linum Glycerinum. FOR COUGHS AND COLDS.	'SAPO-LINI' LINSEED SOAP, 'BROWN WINDSOR' AND "ROSOTTO." CHESTER BIRDLIME. EMOLLIENT For Chapped Hands, &c. ELASTIC STOCKINGS, KNEE CAPS, SOCKS, ETC. 'THERMONE' HEAT RADIATOR.	CHEMICAL Disinfectant GUN COVER and CARRIER. KAY'S TIC PILLS LINUM CATHAR- TICUM PILLS.
---	---	---	---

Prices, Circulars with Name and Address, Specimens, Show Cards, Glass Tablets, &c., &c., on application.

KAY BROTHERS LIMITED, ST. PETERSGATE MILLS, STOCKPORT, Founded A.D. 1786. Incorporated, 1887.

Pears' Soap



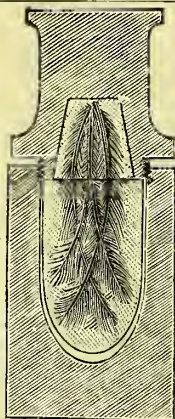
(25 inches high.)

These celebrated Statuettes are supplied free to Retail Buyers upon conditions to be obtained on application to

A. & F. PEARS, Limited,

71-75 New Oxford Street, W.C.

Actual Size of 6d. Novel Boxwood Case.



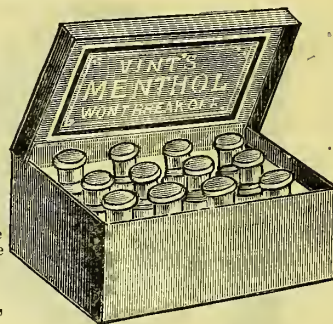
VINT'S PATENT UNBREAKABLE MENTHOL

Is firmly secured to the holder by the insertion of Feather Tips, which Penetrate the Cone, are Soft, Tough, and Spreading, so that it

WON'T BREAK OFF.

The Chemist and Druggist says: "MR. VINT, CHEMIST, HASTINGS, is the originator of an ingenious idea for securing Menthol Cones so that they may be used to the last without fear of breakage."

3/6 & 6/6 doz., of Barclay, Maw, Sanger, Sutton, Edwards, Newbery, May Roberts, Chemists' Association, and all Sundry Dealers.



H. C. QUELCH, Wholesale and Export Agent, LUDGATE HILL, LONDON.



In Brass Boxes only,

Embossed as

shown in these Medallions.

These Cachoux are delicately flavoured

and are the most efficient

BREATH PERFUME

offered to the

Public.

PRINCE ALBERT'S CACHOUX

They look well,
they sell well,
and, most important,
pay well.

Sample gross for 36/- on receipt of cash.

FROM THE LABORATORY OF (c)

THOMAS JACKSON, MANCHESTER.

Are fitted with the
ALBERT GATE for paying
out the Cachoux singly.



A GIFT.

A gift for your select customers. We are prepared to send to every good-class chemist, carriage paid, a parcel of sample packets of the Dorothy Dentifrice. Each envelope will contain a small quantity of this ideal tooth powder, and a little book telling how to cleanse, beautify, and save the teeth. This interesting manual contains letters from Mr. Henry Irving, Miss Fortescue, Miss Sylvia Grey, Miss Minnie Palmer, Miss Kate James, &c., who use and praise the Dorothy Dentifrice. If willing to distribute with discretion, send your name and address to

Dorothy Dentifrice Co., 11 and 13, St. Bride St., London, E.C.

OKELL'S ORIGINAL MONA BOUQUET.

(First introduced by the late JOSEPH OKELL.)

Registered Trade Mark, "DOUGLAS PIER."

The most popular and best-selling Perfume in the market.

Retail Prices, 1/-, 1/9, 3/6, 6/-, 7/6, 10/6 per Bottle.

ALSO 3d. SAMPLE BOTTLES.

Shippers and Wholesale Buyers supplied on the best terms by
THOMAS WEST, 1185 & 1187 CHESTER ROAD, MANCHESTER. STRETFORD.



TO CATCH THE EYE

and retain the impression is the object of a Good Circular.

BOWERS BROS.'

Printing produces the best result.

FINE SATISFACTORY. APPROPRIATE. ATTRACTIVE. ARTISTIC. QUANT.

PLAIN. PRINTING

WHAT APPEALS MORE PERSUASIVELY?

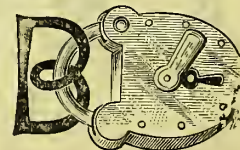
BOWERS BROTHERS are always at your service.

We do not keep our ideas under lock and key; they are for use in all departments of our Business.

BOWERS BROTHERS,

THE PRINTERS,

89 Blackfriars Rd., LONDON, S.E.



Telephone No. 7547.

Telephone No. 7547.

“CAMWAL” TRADE MARK.

TOPS THE TRADE

ONLY PRIZE MEDAL,



LONDON, 1881.

HIGHEST PRIZE MEDAL,



BRADFORD, 1882.

RAISED BY THE
PERSISTENT ENERGY
AND GREAT CARE
OF CHEMISTS

Year	No. of Members	Dividend
1878	119	None
1879	350	None
1880	420	None
1881	540	None
1882	615	2½
1883	708	5
1884	908	6
1885	1,193	8
1886	1,463	6

TELEGRAPHIC ADDRESSES:

Rubine, London.
Chemists, Starbeck, Harrogate.
Camwal, Bristol.



STRENGTHENED AND
SUPPORTED BY THE
APPROBATION OF THE
MEDICAL PROFESSION

Year	No. of Members	Dividend
1887	1,812	7½
1888	1,892	6
1889	2,031	7½
1890	2,088	8½
1891	2,163	10
1892	2312	10%

TELEGRAPHIC ADDRESSES:

Rubine, London.
Chemists, Starbeck, Harrogate.
Camwal, Bristol.

This Company manufactures the various descriptions of Mineral Waters of the highest class and of specified formula, and supplies **ONLY** Chemists and Hospitals.

PRICES.

	In Corked Bots.	In Syphons.		In Corked Bots.	In Syphons.
Carbonated Water	1/-	1/6	Lime Juice	1/-	2/6
Soda	1/-	1/6	Ginger Ale	1/-	2/6
Soda	1/-	1/6	Ginger Beer, Glass	1/-	2/6
Petach	1/-	1/6	Lithia, B.P., 5 grains to Half-pint	1/6	2/6
Petach	1/-	1/6	Iron and Quinine Water	1/6	—
Meltzer	1/-	1/6	Mineral Acid	1/6	—
Lemonade	1/-	2/6			

Syphons, 24s. per dozen.

Cases—3 dozen 3s. 6d.; 4 dozen 4s. 6d.; 8 dozen 5s. 6d. each.

Empties allowed for at same prices.

3d. per dozen charged extra for the delivery of Syphons in London.

SYRUPS.

In 26-oz. bottles, handsomely labelled and capsuled. Raspberry, Strawberry, Cherry, Red Currant, Black Currant, Pine Apple, &c., 8/- per dozen. Lime Fruit Cordial, 6/6 per dozen. Bottles charged 1/- per dozen, and allowed for on return.

A holder (Chemist) of £1 share is entitled to all the advantages of this Association.

SAMPLE CASE OF WATERS SENT FREE.

Handbills with Name and Prices supplied gratis to Shareholders.

The Chemists' Aerated and Mineral Waters Association, Limited,
LONDON, HARROGATE, & BRISTOL.

SYPHONS • SELTZOGENES



Messrs. J. BARRE JOHNSTONE & CO., 20 Loftus St. Sydney, N.S.W.
Agents for New South Wales, Queensland, and New Zealand.

SODAWATER MACHINERY

AND APPLIANCES
BRATBY & HINCHLIFFE LTD
ANCOATS 146 MINORIES
MANCHESTER LONDON

81 ROBERTSON STREET, GLASGOW.

PRICES.

SYPHONS ... 1/6 1/8 and 1/10 each.

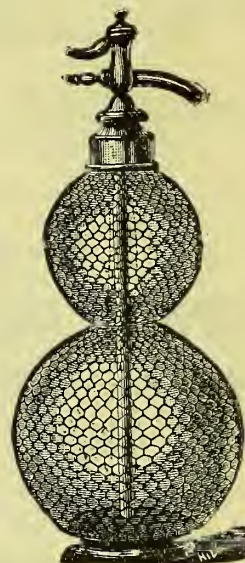
SELTZOGENES.

1	2	3	4	5	8 pint.
5/6	6/2	7/	8/	9/11	15/6 each.

Including two funnels and stopper for charging.

All our Seltzogenes are manufactured on the well-known "Fevre" System, and each one is thoroughly tested before leaving the works.

Messrs. NOYES BROS., 48 Queen Street, Melbourne, Victoria,
Agents for Victoria, South and West Australia, and Tasmania.

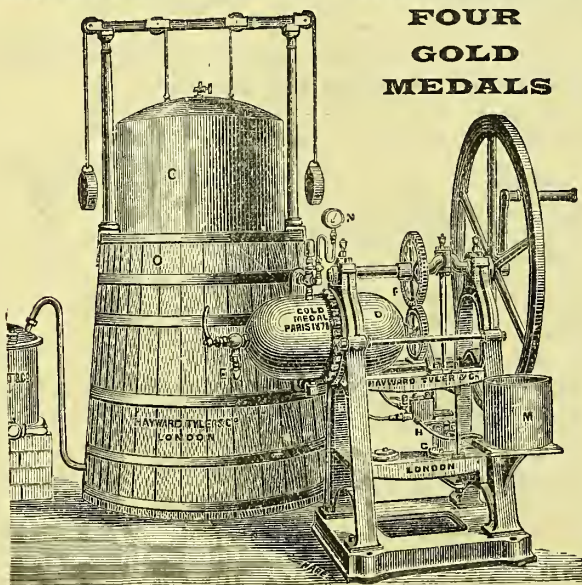


HAYWARD TYLER & CO.

AWARDED FOR

AERATED WATER MACHINERY

FOUR
GOLD
MEDALS



Telegrams—"Tylerox."

Telephone No. 192.

[2]

LIST OF

MASON'S EXTRACTS

AND

WINE ESSENCES.

EXTRACT OF HERBS	LEMONINE
" DANDELION	CIDERINE
" SARSAPARILLA	HOREHOUNDINE
" HOPS	FOAMINE
" GINGER	WINTER EXTRACT
" GINGER ALE	

Mason's Wine Essences.

GINGER	SARSAPARILLA
RASPBERRY	LEMON SQUASH
COWSLIP	CHERRY
STRAWBERRY	PEPPERMINT
ORANGE	PORT
BLACK CURRANT	SHERRY
RED CURRANT	CLOVES
LEMON	ELDERBERRY
LIME FRUIT	DAMSON
JARGONELLE	RAISIN
QUININE	GOOSEBERRY
PINE APPLE	"WARMINE"

SOLE INVENTORS AND MANUFACTURERS—

NEWBALL & MASON,

Manufacturing Chemists,

HYSON GREEN WORKS, NOTTINGHAM.

90, 92 WHITECROSS STREET, E.C.

Rosbach Water

Natural Sparkling Table Water.

This Table Water is drawn from the deep springs situated near BAD HOMBURG, in Germany, the annual health resort of H.R.H. the Prince of Wales, and is the table water used by all visitors to Homburg.

It is proved by the analyses of Sir Charles Cameron and Prof. Wanklyn to be ABSOLUTELY PURE. It is aerated only with the natural gas from the Rosbach Springs.

It contains no solid ingredients or earthy salts like other natural or so-called natural, mineral waters. This means an entire absence of salty taste.

Rosbach Water enriches the flavour of good wine, whisky, brandy, champagne, or any vintage claret instead of suffocating the same, which is usually the case with other table waters on account of their salty constituencies.

Rosbach Water taken pure is a most refreshing and pleasant drink, soft and mellow, and of a beautiful bright, sparkling appearance, and exceedingly soothing to the palate.

A bottle of Rosbach Water after being opened, partly emptied, and left corked up until the next day, will be found as bright and sparkling, retaining its full flavour and taste as no other water has ever proved to be.

Rosbach Water, being alkaline, will be found invaluable in cases of Dyspepsia, Gout, and Torpid Liver.

ROSBACH WATER COMPANY,

4 SUSSEX PLACE, LONDON, E.C.

Per 100 Pints { LONDON, 36s.
Delivered Free { COUNTRY, 39s.

Per 50 Quarts { LONDON, 23s.
Delivered Free { COUNTRY, 25s.

Chemists are invited to apply for a Sample Case for trial, which will be delivered to any address free of charge.

SEVEN
PRIZE MEDALS
AWARDED.**SYPHONS & SELTZOGENES**SEVEN
PRIZE MEDALS
AWARDED.

ENGLISH MAKE.

Perfect Action. Full Strength. Best Workmanship. Thoroughly Reliable.
Well Tested. Metal Guaranteed Free from Lead. Lowest Prices
consistent with First Quality.



THE ORIGINAL AND ONLY REAL
Non-Metallic SYPHONS & SELTZOGENES.

The "MAJOLICA" Porcelain Lined Heads

(By Royal Letters Patent, No. 15,686).

Metallic contamination of the waters utterly impossible. Vide *The Lancet*, 30 April, 1890, and other scientific opinions.

SELTZOGENE CHARGES AT SPECIAL LOW RATES. Send for List.

Samples, Prices, and Full Particulars on application to

THE BRITISH SYPHON MANUFACTURING CO.

Offices: 28 GRESHAM BUILDINGS, GUILDHALL, LONDON, E.C.

HIRST, BROOKE & HIRST (LIM.), LEEDS,

Manufacturing Chemists and Wholesale Druggists, Manufacturers of

ORANGE WINE

Of Finest Flavour and Quality, and specially suitable for the Preparation of Orange Quinine Wine.

PURE ORANGE WINE

(VINUM AURANTII, B.P.), prepared in strict accordance with the Formula of the British Pharmacopœia.

MOST SUITABLE BASIS FOR QUININE AND OTHER MEDICATED WINES.

A. MILLAR & CO., DUBLIN; and 47 MARK LANE, LONDON, E.C.

Or of H. J. ROYDANT & CO., 75 Acre Lane, Brixton. S.W.

A PAYING LINE

FOR CHEMISTS!

CEYLOND

A MARVELLOUS BLEND OF
TEA,

Attractively packed in ½-lb. & ¼-lb. packets, to retail at from 1s. to 2s. per lb., duty and carriage paid.
Write for samples, wholesale terms, &c., to
KEARLEY & TONGE, Mitre Square, Aldgate, London, E.C.

NONE GENUINE WITHOUT THE

TOWER TEA

HIGHEST AWARD, PARIS, 1889.

Analysis by the "LANCET," December 20th, 1890:—

"We have submitted to examination the Teas of the Great Tower Street Tea Company (Limited). They all yield liquors which are generous to the taste, and of full strength and vigour. The results of our analysis indicate the purity and genuineness of the samples."



REGISTERED TRADE MARK.

Where Vacancies exist, Agencies are appointed by



PRIZE MEDAL, PARIS, 1889.

THE GREAT TOWER STREET TEA CO., LIMITED

5 JEWRY STREET, LONDON, E.C.

ORANGE AND QUININE WINE.

The Chemist and Druggist says:—

MESSRS. STEPHEN SMITH & Co., of Bow, E., are putting on the market an orange-quinine wine in wine-quart bottles. It is made according to the British Pharmacopœia, and they have sent us a sample, which we have examined critically. The orange-wine from which the preparation is made is of a pale-brown colour, good orange odour, and contains 7 per cent. of soluble matter other than quinine. This is mainly sugar. Its alcoholic strength we find to be equal to 25 per cent. proof spirit, or 11·8 per cent. by weight of alcohol, so that it is of the higher standard recognised by the Pharmacopœia. The alkaloidal value of the wine is also satisfactory. Three ounces of it yielded 2·3 grains of ether-soluble alkaloid, equal to 2·7 grains of sulphate of quinine, and allowing for experimental loss and the usual cinchonidine content (not extractable by ether) it will be seen that the wine has obtained not only the pharmacopœial *quantum*, but that it has lost little of it by tannic precipitation. The wine is sent out in the quart bottles at a price which leaves the proverbial druggists' profit.

Wholesale Price, 10/- per doz. Cases, 1/6 per doz., returnable.
Terms, net cash.

STEPHEN SMITH & Co.
BOW, LONDON, E.

NATURAL MINERAL WATERS

Packing
Free

INGRAM & ROYLE,

Packing
Free.

LONDON—52 Farringdon St., E.C.

LIVERPOOL—19 South John Street.

VICHY

SOLE IMPORTERS OF

(STATE SPRINGS)

VICHY

ÆSCULAP, CARLSBAD, CARLSBAD SALTS, LA-BOURBOULE, ROSBACH, VALS, &c., &c.

NAME.	Per Dozen.		Original Packages.				NAME.	Per Dozen.		Original Packages.			
	Bots.	½ Bots.	Bottles.	½ Bottles.	½ Bottles.	½ Bottles.		Bots.	½ Bots.	Bottles.	½ Bottles.	½ Bottles.	½ Bottles.
Æsculap	15/	12/	25	30/	50	50/	Levico	15/	12/	25	30/	50	50/
Apollinaris ..	6/3	5/	50	25/	100	39/	Pullna	12/	8/	40	36/	40	25/
Bourboule (La)	11/	..	50	42/	..	..	Rosdort	6/	..	50	25/	..	..
Carlsbad	12/	..	50	46/	..	..	Rosbach	6/	5/	50	24/	100	36/
Condal	..	14/	..	..	50	56/	Royat	9/	..	50	34/	..	..
Contrexeville ..	9/	..	50	35/	..	..	Rubinat	15/	9/	25	30/	50	36/
Flitwick	24/	15/	..	..	..	..	St. Galmier ..	6/	..	50	22/	..	..
Franz-Josef ..	..	12/	..	..	50	42/	St. Marco ..	11/	6/6	50	42/	100	52/
Friedrichshall ..	13/	10/	25	25/	50	40/	Selters	6/	4/0	50	24/	..	17/
Hunyadi-Janes ..	15/	13/	25	30/	50	50/	Vals	8/6	..	50	33/	50	..
Johannis-Brunnen	6/	4/6	50	22/	100	35/	Vichy (State Springs)	8/6	7/6	50	33/	..	29/
Kronenquelle ..	10/	..	50	40/	..	..	"Celestins," "Grande-Grille," &c.	..	..	..	..	..	..

CARRIAGE PAID to any RAILWAY STATION in the UNITED KINGDOM.
DETAILED PRICE LIST AND PAMPHLET ON APPLICATION.

PUREST IN ENGLAND.

BOURNE

SODA, SELTZER,
LITHIA, POTASH,
LEMONADE,
GINGER ALE, &c.

Supplied in Six
Dozen Cases,
Carriage Paid,
by

TABLE

Analysis, &c.,
on
Application.

R. M. MILLS & CO.
BOURNE,
LINCOLNSHIRE.

WATERS

West End Agent, D. WHEATLEY, 16A North Audley Street, W.
City Agents, RAE & CO., 23 Fenchurch Street, E.C. And of all Chemists,
Wine Merchants, Hotels, &c.

SUGAR OF MILK

(SYSTEM LANGEN). 1

Highly recommended by authorities. The
only make of perfect purity in all respects.

AGENTS—

BURROUGHS BROS.

66 Basinghall St., London, E.C.



GO AERATED WATER MANUFACTURERS

HAY'S

SOLUBLE ESSENCES

ARE GUARANTEED TO BE THE FINEST IN THE MARKET

GINGER, HOP, LEMON &c &c

W. HAY, MANUFACTURING CHEMIST

MULL

IN ORDERING SPECIFY HAY'S MANUFACTURE

DENAAYER'S PEPTONOIDS

AND EXTRACT OF MEAT COMPANY, LIM.,
118 BISHOPSGATE ST. WITHIN, LONDON, E.C.

TELEGRAPHIC ADDRESS "DENAAYER LONDON."



DISCRIMINATE FOR YOUR CUSTOMERS!

between the fictitious nutritive value of such invalid foods as are mainly composed of Gelatine or the extractive matters of meat, or both, as many so-called peptones, meat essences, &c., are, and the true

STRENGTH OF MEAT,

which is not yielded by its GELATINE nor by its EXTRACTIVES, but by the ALBUMINOID matters it contains, and which, by Denaayer's process, are dissolved and converted by pepsine into a delightful and elegant preparation.

See THE LANCET, May 2nd; HOSPITAL GAZETTE, June 5th; CHEMIST AND DRUGGIST, April 16th; ANALYST, May 1st, upon Mr. Denaayer's new method for the Analysis of Peptones, whereby the gelatine is capable of determination, whereas this body has hitherto been unavoidably included with peptone albumose by analysts.

Description will best be appreciated with the articles before you, therefore you are invited to send for a free sample of DENAAYER'S STERILIZED PEPTONE OF MEAT (2/- per bottle, ready for use).

DENAAYER'S LIQUID PEPTONATE OF IRON (1/6 per bottle).

PULVIS FERRI PEPTONATIS (Denaayer), 4/- per ounce.

PEPSINA PORCI (Denaayer), 3/- per bottle, one-third of an ounce.

DEPOT AGENCIES—

FOR SCOTLAND—EDINBURGH: Messrs. Duncan, Flockhart & Co.; GLASGOW: Old Apothecaries' Co., Lim.
FOR IRELAND—DUBLIN: Messrs. Hamilton, Long & Co., Lim.; BELFAST: Messrs. Grattan & Co., Lim.

VINACOCA

Embracing the Therapeutic Properties of the COCA Plant, blended with the best Madeira.

COCA FOR TROUBLESOME THROATS.

VINACOCA is a direct stimulant of the most active kind, supporting life in a manner almost miraculous, without disturbance of the vital functions. For the voice, a wineglassful before any ordeal is sufficient. Its effect upon the vocal cords is surprising, and of great value to Public Speakers, Professional and other Singers, and Lecturers.

The VINACOCA is carefully prepared from the best Coca Leaf only. (No addition of Cocaine.)

ONLY ONE WINE (CHOICE MADEIRA)
ONE QUALITY (A 1)
ONE PRICE } THE BEST & CHEAPEST ON THE MARKET.

Sold in Bottles at 3s. 6d. each, or 40s. per dozen, Retail. Usual Trade Discount.
Pamphlets for distribution, carriage paid.

COCA is prepared in various forms: COCA LOZENGES, COCA TABLETS, COCA ELIXIR, COCA TEA, COCA CHOCOLATE, STAMIN (Coca and Beef Extract), COCA TOBACCO, &c.

MENTHOLIN (PATRONISED BY ROYALTY) PREVENTS INFLUENZA.

Is a Perfect Remedy for Coriza or Cold in the Head. Highest opinions from Public and Press.

Retail Price, 1s. 1½d. per Box.

FULL PARTICULARS FROM

THE FRENCH HYGIENIC SOCIETY,

6 CONDUIT STREET, REGENT STREET, LONDON, W.

PERFUMERY.

FANCY SOAPS
Barclay & Sons, Lim.

Evans, Sons & Co.
Ewen, J., & Sons
Farina, J. M.
Grossmith, J., & Sons
Hovenden & Sons
Mulbens, F.
Newbery & Sons (Bardoes)
Otfinger, E.
Pears' Soap (Llm.)

Price's Patent Candles Co.
Rosmarine Manufg. Co.
Rainsbury, S. (Lav. Water)
Sandoid & Co.
Shirley, A. W.

Tildman & Son
 Treatt, R. C.
 Truefitt, H. P. (Llm.)
 Warrick Brothers
 West, T. (Jkell's Mens)

Woolley, Bonn & Co. (Powder)
Wright, Layman & Umney

PHARM. PREPS.
Allen & Hanbry
Anderson & Co.
Barron, Hargrave & Co.

Battley & Watts
Berger, F. | Boehm, F.
Boehringer, C. F., & Sohne
Bolton, I. & Co. (Lim)

Brady & Martin
Burgoyne, Burbridges & Co,
Burroughs, Wellcome & Co.

Chassaign & Co.
Delacre, Ch., & Co.
Duncan, Flockhart & Co.
Ferris & Co.

Fletcher, Fletcher & Co.
Glies Schacht & Co.
Greeff, R. W., & Co.
Hearon, Squire & Francis

Hewlett & Son
Howards & Sons
Jeyes Sanitary Compounds Co.
Kalth & Co. (Cong. Tinctures)

Lambert Pharmaceutical Co.
Largen, G. W.
May & Baker (Lim.)
Moss, J. & Co.

Oppenheimer, Son & Co. (Lim.
Potter & Clarke
Richardsoo, John, & Co. Ltd
Lester, Lim.

ROBERTSON & SONS
Smith, T. & H., & Co.

Sonthall Bros. & Bareilly
Sutton, W., & Co.
Symes & Co.
Tyrer, T., & Co.

White, Alfred, & Sons
Woolley, Sons & Co.
Zimmermann, A. & M.

PHOTOGRAPHIC
Barclay & Sons (Lim.)
Blackfriars, Photographers &c.

Botwright & Grey
Darton, F., & Co.
Fallowfield, J.
Furness Bros.

Fuerst Bros.
Green, R. W., & Co.
Griffiths, W., & Co. (Lim.
Boughton, G., & Sons

Howards & Son (Chemists)
Orme, J., & Co.
Perken, Son & Rayment
Tyrer, T., & Co.

White, Alfred & Sons
Zimmerman & Co.

Allen & Hanburys
Anderston Apothecaries' Hall
Beecham, Thomas

Bromley, C. (Gont and Rhen.
Burgess, E., jun.
Clay, Dod & Co.
Davidson & Gray

Davidson & Gray
Deacon, H. J.
Eade's Gout Pills
Evans, Sons & Co.

George, J. E.
Harroline Pill Co.
Hearon, Squire & Francis
Hill, A. S., & Son | Holloway's

Lloyd, T., Howard & Co.
McKesson & Robbins
Newbery & Sons
Richardson, J., & Co. (Lim.)

Southall Bros. & Barclay
Wand, S. (Pearl Coated)
Warner, W. R. & Co. (Coated)
Williams Dr. Medicine Co.

Wride & Co.
Wyleys & Co.

PILL MACHINES
Plindar, J. W.
Toogood, W. (Coater)
Warner and Pfleiderer

PILLS

Carter Medicine Co.
Richards, J. M.

PLASTERS

Evans, Sons and Co.
Johnson and Johnsons
St. Dalmas, A.

PODOPHYLLIN. & Co.

Keith, B., & Co. | Smith, T.

POLISHING

Bradley & Bonndas (Albano)
Chancellor & Co.
Fleisher, Kaybould & Co.
Fordham, W. B., & Sons (Lim.)
Oskey, John, and sons

PORCELAIN GOODS

Toogood, (Eco. Pots, rosiat.)

POULTRY FOOD

Spratt's Patent (Lim.)

PREP. CHALK

Levermore, Ang., & Co.

PRINTING

Bowers Bros.
Corran, J. R. (Glasgow)
Economic Printing Co.
Ford, Euphonia & Co.
Hilbert, H. | Townsend, J.
Speller & Co.

PUMILINE

Stern, G. and G.

QUININE SALTS

Roshringer, C. F., & Schae
Gresff, R. W., and Co.
Howards and Sons
Zimmermann A. & M.

REINNET

Duncan, Flockhart and Co.
Gresff, R. W., and Co.

RUBBER

Tyer Rubber Co.
Warne & Co.

SACCHARIN

Allen and Hanbury
Barroughs Bros.
Barroughs, Wellcome and Co.

SALICIN

Macfarlan and Co.
Smith, T. and H., and Co.

SALICYLIC ACID

Barroughs, Barroughs and Co.
Farrat Bros.
Kuhn, B.
Zimmermann, A. and M.

SALT

Stern, G. and G. (Pepsalis)

SAVONS, PICKLES

Goodall, Backhouse and Co.
Mason, G. and Co. (Lim.)
Tyrer, P.

SCHOOLS, &c.

City School of Chemistry and
Physics (Lim.)
Davie, F.
Liverpool School of Pharmacy
London Homeopathic and
Medical School
Manchester Col. of Pharmacy
Northern School of Pharmacy
St. Andrew School of Pharmacy
South London School of
Pharmacy (Lim.)
The School of Pharmacy
Westminster College

SELTZGENES

Brathes and Hinchliffe (Ld.)

British Syphon Co.

Evans, Sons and Co.

Fordham, W. B., & Sons (Ld.)

Lynch and Co. (Lim.)

May, Roberts and Co.

SEEDS

Potter & Clarke

SHAVING

Hovenden & Sons (Exeels)

Lloyd, Mrs. A. S. (Exeels)

SLEEP DIP

Fletcher Bros. & Co.

Jeyes Sanitary Compounds Co.

SHOP FITTERS

Bowling and Govier

Bygrave, J. and W.

Josephs, P.

Natali & Co. | Natali, E.

Potts, H., and Co.

S. Howell

Treble, G., and Co.

SOAP

Ayrton and Saunders

Barclay and Sons (Lim.)

Blondeau and Co. (Viasilla)

Bronnley, H., and Co.

Calvert, F. C., and Co.

Cook, B., and Co.

Dodd Bros.

Fordham, W. B., & Sons (Ld.)

Jeyes Sanitary Compounds Co.

Milnefs, F. | Pears, A. & F.

Price, Napier, & Co.

Wright, Layman & Umay

SPECTACLES

Botwright and Gray

Darton, F. and Co.

Perken, Son and Rayment

SPONGES

Cresswell, Hor., & Schmitt

Evans, Sons and Co.

Peterson, M., and Co.

SODIUM PEROXID.

Burton, W., & Sons

STAMPS (REVENUE)

Hickson, J.

STARON

Chancellor & Co. (Mack's)

Donble

Critchley (Glass)

STOPPERS

Austin and Co. (Sprinklers)

Barnett and Foster

Melin, C.

Stipendum Stopper Co

STOVES

Clark, S., and Co. (Lim.)

SUGAR

Fletcher, Fletcher and

Stevenson

Gibson, R., and Son

SUGAR OF MILK

Barroughs Bros.

SULFONAL

Barroughs, Wellcome and Co

Gresff, R. W., and Co.

May and Baker (Limited)

SURGICAL

Ayrton and Saunders

Barclay, W. H., and Son

Barclay and Sons (Limited)

Brady & Martin

Cocking, J. |

Harrison, T. H.

Haywood, J. H.

Henckel, J. A.

Krohn and Sesemann

Liverpool Patent Lint Co

Powell & Barstow

Quelch, H. C.

Richardson, John, & Co. (Lel-

cester), Lim.

Robinson and Sons

Schntze, F. and Co.

Tyer Rubber Co.

White & Co.

Wood, F. | Wood, Vincen,

SYPHONS

Barnett and Foster

Brathes and Hinchliffe (Ld.)

British Syphon Co.

Fordham, W. B., & Sons (Lim.)

Idris and Co.

Kilner Bros. | Melin, C.

Schweppe, J., & Co.

SYRUPS

Anderson & Co.

Fletcher, Fletcher (Liquore)

Idris and Co.

TABLETS

Bylton, Astley & Co. (Sulphur)

Corean, J. R. (advertising)

TEA

Oave, Johnson & Co.

St. Tower St. Tea Co.

Kearley & Tonge

TEETHING PADS

Harriott, E., & Co.

THERMOMETERS

Bailey, W. H., and Son

Barclay and Sons (Lim.)

Darton, F., and Co.

Evans, Sons and Co

Hicks, J. J.

Perkan Son and Rayment

TOILET

Allen & Hanbury (Christma'

Barroughs, Wellcome & Co

(Lanoline)

See Oil Co. (Lim.)

Hovenden & Sons

Welch, H. C.

Wooland, A., and Sons

Trineatt, H. P. (Limitsd)

TOOTH PASTE

Anglo-American Drng Co

(Lim.)

Beecham, T.

Jewsbury and Brown

Sutton, O., and Co. (Block)

Wilson, A. (Santer's)

Woods, M. (Arecal)

TOOTHACHE CURE

Talte & Co.

TRUSSING

Bailey, W. H., and Son

Evans, Sons & Co.

Haywood, J. H.

White & Co.

Wood, V.

TYPEWRITERS

Remington Standard

URETHANE

Howards & Sons

VACCINATION

Sanitary Wood Wool Co., Lim.

(Shield)

Vaccine Association (Lya ph)

VALVES AND

TENSURE, ACET

Bardos and Co.

Brett, F. J.

Ocker, G. B., & Co.

Orridge and Co.

VASELINE

Cheesbrough Manufacturing Co.

VETERINARY

Bird & Storay

Curling & Co.

Day, Son and Hewitt

Edman, Sons and Co

James, W. H. (Blisars)

Jeyes Sanitary Compounds

Lloyd, T., Howard & Co.

Bookledge, F. E.

Opatts (Dogs)

Walker, Troke and Co.

VINOLIA (Superfitt's)

Blondeau and Co.

WHOLESALE AND

REPT DRESSING

Allen and Hanbury

Anderson & Co.

Baron, Harvey and Co.

Battley and Watts

Barrymore, Barroughs and Co.

Bush, W., and Co.

Bush, W. J., and Co.

Butland, J. and Co.

Davy, Yates & Routledge

Devere, Ch. & Co.

Evans, Sons and Co.

Evans, Leecher and Wses

Ferris and Co.

Fox, W., and Son

Goodall, Backhouse and Co.

Lothome and Saltmer

Lloyd, T., Howard and Co.

Macfarlan, J. F., and Co.

Morrison, K., & Co.

Murdoch, J. R.

Patte and Clarke

Richardson, J., and Co.

Smith & Sons

Symes & Co.

Thompson and Capper

Walker, Troke and Co.

Willows, Francis and Brist

Woolley Jas., Sons and Co.

Wright, Layman and Umn, y

WINES, SPIRITS

Ambsrecht, Nelson and Co.

(Ocea)

French Hygienic Socy. (Ocea)

(Ocea)

Hirst, Brooke & Hirst (Lim.)

(Orange)

Idris & Co.

Jackson, T.

Miller, A., & Co. (Orange)

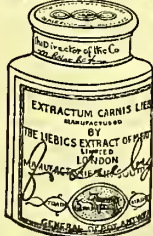
Robinson, B.

Smith, S., & Co. (Orange)

ONLY
GENUINE
WITH SIGNATURE
IN BLUE

Liebig

FOR
SOUPS
SAUCES
GRAVIES
AND
MADE
DISHES



LIEBIG

"COMPANY'S"

EXTRACT

OF BEEF.

Cookery Books Free on application to

LIEBIG'S EXTRACT OF MEAT CO., LTD.,
9, Fenchurch Avenue, E.C.

GEO. MASON & CO.'S ESSENCE OF BEEF.

HOSPITAL FOR CONSUMPTION, BROMPTON.

Order No. 1080.

"Please supply 120 tins Mason's Essence of Beef as before."



ST. MARY'S HOSPITAL, PADDINGTON.
Order No. 802.
"Please send at once 3 Gross Mason's Essence of Beef."

TRADE MARK.

"O.K." BOUILLON.

The "O.K." Bouillon is the best and cheapest Beef Tea ever put before the public. It is made in England from British Beef. It can be sold as low as 6d. per tin.

CONCENTRATED BEEF TEA, MEAT LOZENGES.

MASON'S MALTED FOOD FOR INFANTS.

PRICES LISTED POST FREE.

417 & 419 Kings Road, Chelsea, London, S.W.

MACHINE-CUT DRIED BITTER ORANGE PEEL.

This season's Peel is of exceptionally fine quality, being as free as possible from pith and of good colour and aroma.

SAMPLES WILL BE SENT FREE ON APPLICATION.

CHAS. SOUTHWELL & CO.,
DOCKHEAD, LONDON, S.E.

JAMES BOULTON & CO., LIM.

CHEMICAL MANUFACTURERS,

CRAYFORD MILLS, STRATFORD, LONDON.

SPECIALITIES—

THE NEW PRESERVATIVE,
SEMPER-DULCIS or EVER-SWEET

For Milk, Butter, Cream, Sausages, &c., &c.

FINEST BUTTER COLOR
(BUTTERCUP BRAND).

ACIDS OF ALL KINDS.

GRANULATED EFFERVESCENT PREPARATIONS.
BUYERS SHOULD SEND FOR QUOTATIONS.

EIGHT PRIZE MEDALS AWARDED.

GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., & 2s. each.

GOODALL'S BAKING POWDER.

The Best in the World. 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., and 5s. Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2d., 6d., & 1s. each.

GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

GOODALL'S QUININE WINE, B.P.

Best Tonic yet Introduced. Bottles, 6d., 1s., and 2s. each.

GOODALL'S GINGER-BEER POWDER.

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

GOODALL'S BRUNSWICK BLACK.

Painting Stoves, Grates, Iron, Tin, &c. 6d. & 1s. Bottles.

GOODALL'S LAVENDER WATER.

Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

GOODALL'S PLATE POWDER.

Polishing and Cleaning all Metals. Boxes, 6d., 1s., and 2s.

GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In ½-pint, 1-pint, and Quart Boxes, 3d., 6d., and 1s. each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS

PATENT MEDICINES AND DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS.

WYETH'S BEEF JUICE.

A liquid preparation of the Choicest Beef, containing the Nutritious Albuminous principles in an unaltered and soluble form.

Because WYETH'S BEEF JUICE is Pleasant and Agreeable to the taste.

Possesses five times more nourishing properties than other similar preparations.

Nutrient and stimulant properties so proportioned that it can be retained by the stomach in extreme cases of debility.

Two-ounce bottle contains all the Nutritious Albuminous principles of three pounds of clear lean meat.

Because these and many other points of superiority have been brought to the attention of Medical Men, Nurses, and Hospitals.

Because they have proven the claims *TRUE*, the demand for WYETH'S BEEF JUICE has become constant, and constantly increasing throughout Great Britain.

For the information of the

RETAIL CHEMIST

who has not already stocked WYETH'S BEEF JUICE we make this announcement.

GENERAL AGENTS FOR GREAT BRITAIN AND FRANCE—

LONDON. | **ROBERTS & CO.** | PARIS.

DISTRIBUTING AGENTS FOR

LANCASHIRE—JAS. WOOLLEY, SONS & CO., Manchester.

YORKSHIRE—GOODALL, BACKHOUSE & CO., Leeds.

SCOTLAND—RAIMES, CLARK & CO., Edinburgh.

MIDLANDS—F. H. PROSSER & CO., Birmingham.

And all Wholesale Druggists and Chemists.

PREPARED BY

JOHN WYETH & BROTHER,

Manufacturing Pharmaceutical Chemists,

PHILADELPHIA, PA., U.S.A.

LONDON, 30 SNOW HILL, E.C.

ARMOUR'S

CHICAGO,

AND

59 & 60 TOOLEY STREET,

LONDON, S.E.

We don't make
PEPSIN WINE at 1/8 per pint,
or
ACID, GLYC. PEP. at 1/10 per lb.
BUT YOU CAN
from Armour's
GLYCEROLE PEPSIN.

You don't want to pay 10s.
to 12s. for what you can make
for 1s. 10d.

1-lb. Bottles, 6s. 3d.

1-gall. (U.S.) Jugs, 32s.

Also,

Glycerole Pancreatin.

PURE PEPSIN TABLETS.

3 GR.

Each Case now bears an at-
tractive label, with the words:

"ARMOUR'S

PURE PEPSIN TABLETS
FOR INDIGESTION."

Bottles of 20 Tablets, 8s. 6d. per doz.

1-lb. Tins 7s. .. 25s. .. 32s.

PHARMACEUTICAL

WE
KILL
NEARLY
2,000,000 PIGS
PER ANNUM.

Peptonising Tablets.

For the predigestion of foods.

Recipes supplied with each tube.

Tubes of 15 tablets, 1 doz. in a
case, 7s. 6d. per case. 1-lb. tins,
10s. 6d.

Pure Pancreatin.

1-oz. bottles ... 3s. 6d.

1-lb. tins ... 32s.

Retains the power of all the
pancreatic ferments.

PEPSIN

1:2,500 Test.

(a) Insoluble Powder.

Non-hygroscopic.

For Pill or Powder.

Makes Pepsin P.B. at 11d.
per oz.

See our Formulary.

(b) Scale Soluble.

(c) Powdered Scale "

For liquid forms.

1-oz. Bottles 3s. 6d.

1-lb. Tins 32s.

MAILED FREE.

"Armour's Formulary"

Of Digestive and Medicinal
Preparation.

"Culinary Wrinkles"

AND

Attractive Booklets

FOR DISTRIBUTION
TO MEDICAL MEN.

5,000 TEST.

OUR NEW PEPSIN

GRANULAR.
INODOROUS.
NON-HYGROSCOPIC.
READILY SOLUBLE.

Combines the good points of
both soluble and insoluble**PEPSINS.**USE $\frac{1}{8}$ grain in place of 1 grain
Pepsin, P.B.

1-oz. bottles ... 7s.

1-lb. tins ... 64s.

NUTRIENT WINE

OF

Beef Peptone.

PURE PREDIGESTED BEEF: HIGH-
CLASS SHERRY.

A Real Food,

its sale

requires

No Wine Licence.

16-oz. Bottles, 4s. per doz., 39s.

Samples for Medical Men,
and special pamphlets with each
case.

PRODUCTS

EXTRACT

OF

BEEF.

PRIME BEEF.

NO BURNT FLAVOUR.

NO CHEMICAL TASTE.

PREFERRED BY

ALL GOOD COOKS.

ESSENCE

OF

PEPSIN.

A finely flavoured Fluid
Pepsin of great activity.

THE LANCET says: "A
distinct advance on ordinary
preparations of this class."

4-oz., 2s.; 18s. per doz.

8-oz., 3s. 6d.; 33s. "

SELLS WELL.

PAYS WELL.

ARMOUR'S PRODUCTS
ALL PAY
THE RETAILER
A LIVING PROFIT.

ALL THE LEADING
WHOLESALE
STOCK
THEM.

SALEABLE GOODS.

THE VEREKER IMPROVED CHLORIDE AMMONIUM INHALER.

The value of Ammonium Chloride Vapour in the treatment of the affections of the mucous membrane of the throat is widely appreciated, but it is absolutely necessary that the vapour be delivered perfectly pure; free, that is, from both alkaline and acid excess. It is claimed for the Vereker Inhaler, in its improved form, that the neutrality of the vapour, once the apparatus is properly set, is absolutely to be relied upon, and it may be inhaled without the slightest irritation in all catarrhal conditions of the fauces and pharynx. To meet special cases any volatile body desirable may be used with the Ammonium Chloride Vapour by adding it to the liquid in the wash bottle.

In case, 5s. each. The "Vereker" is, furthermore, in a really portable form, easily charged, and, once properly arranged, contains a sufficiency of material to last for a considerable number of inhalations. Supplied to the Trade in neat cases, at 5s. each.



MALTO-RICINE.

A solution of the finest castor oil in Kepler Malt Extract, representing 50 per cent. of castor oil. The nauseous and very objectionable taste of the castor oil is well disguised, and even the laxative properties of the oil enhanced, in this combination, to which the most fastidious patients, as in the case of women and children, are not found to object. Malto-Ricine is supplied to the Trade in two sizes, at 8s. 6d. and 20s. per dozen.

ARTIFICIAL EAR-DRUMS (Ward Cousins).

These effective membranes, which consist of cone-shaped skeleton drums of a delicate texture, are highly recommended as a substitute for the natural drum in perforation of the natural membrane, and to assist the hearing in deafness caused by other affections; also



as an antiseptic in disease of the middle ear attended with suppuration. These drums were exhibited and practically demonstrated in the Section of Otology at the Leeds meeting of the British Medical Association. They are inexpensive, and may be easily inserted by the patient. The drum when *in situ* causes no discomfort. They are made in three sizes, Nos. 1, 2, and 3, the last being the largest. Supplied to the Trade in boxes containing 3 dozen drums, at 8s. 6d. per dozen boxes. Combination Blunt Probe and Nippers for insertion and extraction, 8s. per dozen.

SACCHARIN AND SACCHARIN "TABLOIDS."

Saccharin has won the grateful praise of many thousands of diabetic patients, to whom "sweet" in any other form was fatal. One or two tiny "Tabloids" added to a cup of tea, coffee, or cocoa—in lieu of as many lumps of sugar—will impart to it a sweet and delicate flavour. The Saccharin "Tabloids" are now being used on the tables of many distinguished persons as a delicacy in preference to the ordinary tea and coffee sugars, as they do not impair the aroma of the choicest tea or coffee. Tourists and travellers find them eminently useful and convenient. Saccharin soluble supplied to the Trade in 1-oz. and 1-oz. bottles, at 14s. and 46s. per dozen. Saccharin "Tabloids" in bottles of 100 and 200 at 7s. 6d. and 14s. per dozen.



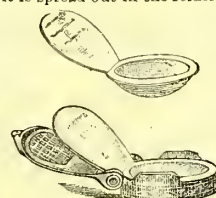
WAFER MEDICINE CACHETS (B., W. & Co.). (E. GORLIN'S PATENT.)

An ingenious yet simple method of taking disagreeable medicines in the form of liquid, powder, or "Tabloids." To charge a Cachet, which is composed of pure rice starch, it is spread out in the folders as shown in the accompanying illustrations, and the contents placed in the cup. The lid of the Cachet is then wetted and brought over by means of the lid of the folder. When pressed on the top of the cup it is completely sealed, and prevents any egress of the contents into the mouth. Just prior to taking the Cachet it should be dipped in water and then placed on the tongue, and may be easily swallowed with a little water.

The *British Medical Journal* says they "are well adapted for the administration of unpalatable powders or liquids."

The *London Medical Recorder* reports:—"They will be welcome to medical men and to their patients, and also to pharmacists, whose labours they will lighten."

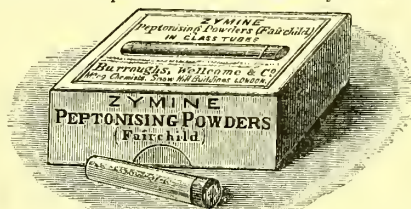
Supplied to the Trade in boxes of 100, at 14s. per dozen boxes.



B., W. & CO. WAFER MEDICINE.

PEPTONISING POWDERS (Fairchild).

To peptonise food, either for children or invalids, the Peptonising Powder (Fairchild) will be found eminently satisfactory, and the process itself is so simple that the least-trained nurse can well carry it out. Each powder contains sufficient zymine and sodium

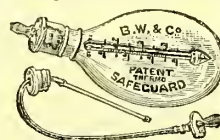


bicarbonate to completely digest a pint of milk, and the fullest directions are given in a little brochure which accompanies each box. Peptonising Powders supplied to the Trade in boxes containing 1 dozen tubes, at 14s. per dozen boxes.

B., W. & CO. PATENT THERMO-SAFEGUARD FEEDING-BOTTLE.

This feeding-bottle differs from all others in the fact that a thermometer which instantly registers the temperature of the food is embedded in the glass. It is also graduated in ounces. The Thermo-Safeguard Feeding-bottle enables the nurse to ascertain at all times the temperature of the food given to the child. The bottle is made of flint glass of the most approved shape, and has no angles in which the milk can coagulate. It has the further advantage (since the bottle is marked in ounces) of giving a register of the exact amount of food taken at each feeding, and thus tends to avert the evil of over-feeding.

"The bottle has a great deal to recommend it."—*Brit. Med. Journ.*
The B., W. & Co. Patent Thermo-Safeguard Feeding-bottle supplied to the Trade in three sizes, at 10s. 6d., 14s., and 22s. per dozen.



SALOL AND SALOL "TABLOIDS."

Salol may be said to be composed of 60 per cent. salicylic acid and 40 per cent. carbolic acid. Insoluble in the gastric juice, it is stated to dissolve readily in the intestinal secretion after admixture with the pancreatic flow. It has a nearly imperceptible aromatic odour, is quite tasteless (unless held in the mouth for some time), and is asserted not to irritate the stomach. Salol supplied to the Trade in crystals at 1s. 3d. per oz. Salol "Tabloids" (5 gr.) in bottles of 25 and 100, at 10s. and 26s. per dozen.

BURROUGHS, WELLCOME & CO., MANUFACTURING CHEMISTS,

LONDON, NEW YORK, MELBOURNE, BRUSSELS, PARIS.
SNOW HILL BUILDINGS, 82 & 84 FULTON STREET, 456 COLLINS STREET WEST, 83 MONTAGNE DE LA COUR.

"VASELINE" SOAPS.

Three Styles

PERFUMED. Boxes of 3 doz. Tablets ... }
 UNSCENTED. Ditto ditto ... } **24/-** Per gross Tablets.
 TAR. Card boxes of 6 Tablets ... } Assorted
 if preferred.

CHEAPER, BETTER, AND MORE PROFITABLE THAN ANY SOAPS IN THE WORLD.

CHESEBROUGH MANUFACTURING CO., 42 HOLBORN VIADUCT, LONDON, E.C.

Sole Proprietors and Makers of "VASELINE."

DERMATOL DUSTING POWDER



Is a perfect preparation for Toilet and Nursery uses. The formula was originally suggested by Drs. HEINZ and LIEBRECHT with the view of embodying and utilising the valuable properties of Dermatol for the daily requirements indicated. This new Toilet Powder may be taken as being absolutely non-poisonous, free from odour, and free from all possible irritating material. The properties of Dermatol, either as a vulnerary or for its soothing effect in chafed and irritable conditions of the skin, its drying and antiseptic character, are well known and recognised in many memoirs that have appeared of late; and the Dermatol Dusting Powder, which is a combination of Dermatol with pure rice starch powder, will readily recommend itself, when this fact is considered, as a high-class toilet preparation. In boxes containing 50 grammes (about 1½ ounces) each.

DERMATOL DUSTING POWDER supplied to the Trade in boxes at 8/- per dozen.

SOLE AGENTS FOR GREAT BRITAIN AND IRELAND—

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

CHASSAING & CO.'S PEPSINES $\frac{c}{c}$ PEPTONES $\frac{c}{c}$ PANCREATINES $\frac{c}{c}$

LATEST AWARDS:

Calcutta, 1883, First Class Certificate and Gold Medal; Sydney, 1888, Gold Medal;
 Kingston (Jamaica), 1891, Diploma of Honour, &c.

PARIS UNIVERSAL EXHIBITION, 1889, GOLD MEDAL.



Quotation of some PEPSINES $\frac{c}{c}$ PEPTONES $\frac{c}{c}$ PANCREATINES $\frac{c}{c}$

Pure Extract Pepsine $\frac{c}{c}$	(French Pharmacopœia) standard	50	26/6	per lb. net.
Amylaceous Pepsine $\frac{c}{c}$	(French Pharmacopœia)	"	20 11/	" "
Pepsine in scales $\frac{c}{c}$	"	"	30 17/	" "
Pepsine Powder, solub. $\frac{c}{c}$	"	"	30 12/	" "
Liquid Pepsine $\frac{c}{c}$	"	"	25 123/	per gall. net.
Pancreatine $\frac{c}{c}$	"	"	20 16/9	per lb. net.
Dry Beef Peptone $\frac{c}{c}$	"	"	— 12/	" "

Quality and standards warranted. Pepsine of lower or higher standards manufactured.

PRICES ACCORDING TO STANDARDS.

Sole Agents for the United Kingdom—**FUERST & SONS., 17 PHILPOT LANE, LONDON, E.C.**
CHASSAING & CO., 6 Avenue Victoria, PARIS.



ESTABLISHED 1859.

CHIEF OFFICE: 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES: FINK'S BUILDINGS, MELBOURNE, VIC., AND
12 EMPIRE CHAMBERS, YORK STREET, SYDNEY, N.S.W.

A weekly journal, supplied from the chief office in London to subscribers and persons connected with the trade only. Subscription, 10s. per year, payable in advance, including a copy of the DIARY next published, and postage to any country in the world. Single copies, 4d. each. Cheques and Postal Orders should be made payable to "EDWARD HALSE," and crossed "MARTIN'S BANK (LIMITED)."

AS AN OFFICIAL JOURNAL

THE CHEMIST AND DRUGGIST is supplied regularly to every member of the following Societies:—PHARMACEUTICAL SOCIETY OF IRELAND, SOUTH AFRICAN PHARMACEUTICAL ASSOCIATION, MIDLAND PHARMACEUTICAL ASSOCIATION OF NEW ZEALAND, CENTRAL ASSOCIATION OF NEW ZEALAND, OTAGO PHARMACEUTICAL ASSOCIATION, PHARMACEUTICAL SOCIETY OF QUEENSLAND, PHARMACEUTICAL SOCIETY OF SOUTH AUSTRALIA, and TASMANIAN PHARMACEUTICAL SOCIETY.

CONTENTS: VOL. XLII. No. 10.

	PAGE		PAGE
Bankruptcy Reports	348	Scotch News.....	331
Business Changes	338	The Winter Session:—	
Correspondence:—		Pharmaceutical Society of	
Letters to the Editor, Dispens-		Great Britain	333
ing Notes, Legal and Mis-		Chemical Society.....	333
cellaneous Inquiries	356	Society of Chemical Industry	334
Deaths	348	Chemists' Assistants' Associa-	
Editorial Comments:—		tion	336
Plumbiferous Acids	340	Cambridge Pharmaceutical	
Chemists and Railway Rates ;		Association	337
American Free Trade.....	341	Midland Counties Chemists'	
Why Wait for the Public		Association	337
Prosecutor ?.....	342	Glasgow Pharmaceutical As-	
Notes	342	sociation	337
English News	328	Edinburgh Chemists' Assis-	
French Pharmaceutical News ..	331	tant's Association	338
Gazette	338	Manchester Pharmaceutical	
Irish News	330	Association	338
Legal Reports	344	Trade-marks Applied for	349
Next Week	360	Trade Notes	350
Parliamentary News	332	Trade Report	352
Personalities	350	What Newcastle Chemists Think	
Post-card (Valentine) Competi-		Wills of Deceased Chemists....	351
tion.....	339		

IMPORTANT TO ADVERTISERS.

MERCHANT SHIPPERS' NUMBER.—Next week THE CHEMIST AND DRUGGIST will, in addition to the ordinary circulation, be distributed to those merchant shippers of the United Kingdom who are known to be shippers of drugs, chemicals, perfumery, druggists' sundries, and other goods manufactured or sold by those who have business relations with the drug-trade. The issue will therefore be one of special value to all such firms, and already the publisher has received instructions from many to insert specially-compiled advertisements. We shall be going to press with the advertisement section early in the week, and cannot guarantee to insert displayed advertisements received later than Tuesday. All firms who wish to take advantage of the issue should therefore address the publisher without delay.

SALICYLIC ACID is manufactured in the United States by one firm—Herf & Frerichs. It is not made in England at all according to the Kolbe patent, but two firms, at least, make the natural acid.

Summary.

IT transpired in a legal case at Dublin that the late Mr. H. N. Draper's assets were valued at 93,000*l*.

IN an Editorial Note we discuss certain points arising under the new railway rates, and give hints as to checking weights, &c.

UNDER "Parliamentary News" new regulations will be observed regarding the importation of dutiable chocolate confectionery.

WE had 320 post-card votes on the valentines recently published, and we therefore announce this week awards to both poets and critics.

THE Pharmaceutical Council have recovered four penalties of 5*l*. each from Mr. W. F. L. Smith, of Cardiff, who, as the Thoracine Company, sold poisons.

AT Cardiff a homœopathic practitioner who used the title "Dr.," he not holding a registrable qualification, has been fined 10*l*. and costs under the Medical Act.

DUMFRIES chemists have resolved to seek for Parliamentary objection to the recent decision of the Inland Revenue Board in regard to the sale of ginger-wine essence.

AT the evening meeting of the Pharmaceutical Society, on Wednesday, Professor W. R. Dunstan delivered a lecture on the aconite research to a fairly good audience.

THE "Midland Pharmaceutical Association" is the new title which Birmingham chemists have adopted for their Society, which is otherwise constitutionally altered.

ROBERT SPENCER, a Birmingham chemist, is under arrest on a charge of murdering a young woman by performing an illegal operation upon her. This is said to have happened some years ago.

AN English chemist, Mr. Thomas Buck, has left personalty amounting to 125,000*l*.—not, however, made out of his business. The Pharmaceutical Benevolent Fund benefits by his will to the amount of 500*l*.

THE Royal College of Physicians has succeeded in proving to the satisfaction of Justice Smith that it has power to grant diplomas covering surgery as well as medicine, contrary to the opinion of the General Medical Council.

ANOTHER action has arisen out of the recent *Electrical Review* articles. In the present action it is the *Review* that takes proceedings against Mr. Harness, the electric-belt maker, for alleged injurious or libellous statements.

MR. JUSTICE KEKEWICH, in the course of his decision *re* the injunction asked for by Sequah (Limited) to restrain an old employé (which he refused), remarked that he did not approve of the plaintiff company's multiplication of Sequahs.

THERE was a somewhat disappointing discussion on the lead in citric and tartaric acid matter at the Society of Chemical Industry's meeting on Monday night. We report the discussion, during which a letter from Professor Atfield was read, upon which we comment editorially.

SODA-WATER containing a little lead, but no soda, has again been the subject of a prosecution, under the Sale of Food and Drugs Act, at Brentford. The Magistrates thought there ought to have been some soda in the water, though they did not seem disposed to insist on the 15 grains per bottle prescribed by the B.P.

OUR Paris correspondent in the course of an interesting letter calls attention to the small number of true English pharmacists with the first-class French qualification necessary for practice in Paris. He also reports briefly on M. Milne-Edwards's observations on the remarkable indisposition exhibited by goats to the physiological influences of morphine.

MEMBERS of the Glasgow Pharmaceutical Association have discussed the relations of the trade to the Pharmaceutical Society. The only striking item in the discussion was Mr. Currie's assertion that medical men can only dispense medicine for their patients, and upon this it is seriously proposed to appeal to medical authorities for assistance in closing doctors' shops.

English News.

The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

Cocoa Festivities.

On February 21, the employes of Messrs. H. I. Rowntree & Co.'s cocoa-works, York, had their annual social evening. The works were closed early, and about 600 people sat down to a substantial tea in the Corn Exchange, Mr. Joseph Rowntree occupying the chair. A musical programme consisting of songs, trios, glees, &c., was gone through by the Orpheus Quartette, and a magic-lantern entertainment was given by Mr. J. W. Rowntree.

The Strike in the Glass-bottle Trade.

The protracted strike in the glass-bottle trade of South Yorkshire is being attended with the usual disastrous results. The employers, with the view of putting themselves in a position to compete more successfully with foreign manufacturers, asked their men to submit to a reduction in wages. The men refused, came out on strike, and put themselves in such an attitude of defiance that at present there is no prospect of a settlement, although the workpeople are suffering the greatest privations. The difficulty of obtaining supplies of medicine, mineral-water, and similar bottles from local sources (writes our Sheffield correspondent) has brought the foreign competitor into the field, and firms that never before purchased a foreign made bottle direct have now given orders for hundreds of gross. The difference in price more than pays for the increased cost of carriage from Germany and leaves the advantage with the purchaser. A German firm can supply small bottles at 8s. 6d. per gross—South Yorkshire makers have charged 11s. to 12s. per gross for them—and if the foreign rival once secures a good footing here he will not be readily beaten off. If the dispute is not soon settled it will be a very serious matter for the mineral-water industry.

Saltpetre in Milk.

When Mr. A. H. Allen came to analyse some skim-milk purchased from Mrs. Hearnshaw, at Sheffield, he found it contained 10 per cent of added water. When asked by the Stipendiary Magistrate to explain how the water got into the milk Mrs. Hearnshaw said it occurred through the cows having eaten so many turnips. As her customers did not like the taste of turnips she had dissolved a little saltpetre in water and put it in the milk to destroy the taste. That was all the water she had added to it. The Stipendiary did not think the turnips accounted for all the water in the milk, and fined her 15s. and costs.

Oxalic Acid "Not a Scheduled Poison."

Alfred Brown, 36, employed at an aerated-water manufactory at Yeovil, gave a boy a penny to go to Messrs. Gatward & Wright's, chemists, for a pennyworth of oxalic acid. It was brought to him at the King's Arms, where he mixed it with water, drank it, and died soon afterwards. At the inquest A. K. C. Johnson, junior assistant at Messrs. Gatward & Wright's, said he supplied the lad with a packet, containing $\frac{1}{2}$ oz. of oxalic acid, which was labelled "Poison." He cautioned the boy that it was poison. It was not a scheduled poison, he said, but was used a great deal.

A Chemist's Apprentice Poisoned by Accident.

Henry Honman, 23, son of Mr. Alfred Honman, chemist, of Upper Street, Islington, had been apprenticed to his uncle, Mr. Adlington, chemist, 6 Weymouth Street, Cavendish Square, and had been with him nearly three years. Lately he had complained of sleeplessness and blood-spitting. On Saturday night, February 25, he asked his uncle for the key of the pharmacy, and went down to get some medicine. It is supposed that at the same time he took some crystals of chloral hydrate to induce sleep. On Sunday at noon he was heard vomiting, and on breaking the door open he was discovered unconscious. He died in a few

hours. The jury returned a verdict of death from misadventure.

Oxalic Acid for the Workless.

Noah Stephen Bennett, 55, had been out of work for nine months owing to failing eyesight. He owed his landlady 25s. He borrowed 4d., bought two pennyworths of oxalic acid at two shops, took the lot, and went into a public-house in Bermondsey New Road and washed the poison down with a pint of beer. Then he said what he had done. He died before admission to the hospital. The jury returned a verdict of suicide during temporary insanity.

"Shocking and Disgraceful."

At the Grimsby Borough Police Court, on March 3, Edwin A. Woodhouse, chemist and druggist, Cleethorpe Road, and Catherine Little, his housekeeper, were summoned for being drunk and disorderly, and the former was also summoned for discharging a revolver in the street. The defendants pleaded not guilty to the charge of drunkenness, but Mr. Woodhouse admitted firing the revolver. On the previous Saturday night, Sergeant Clarke said, there was a great crowd round the defendant's shop, and defendants were outside drunk, and creating a great disturbance. They refused to go in, but he pushed them into the shop. Woodhouse then rushed upstairs, threw the window open, and fired a revolver. Soon after the female defendant rushed out again, and was taken away in custody. Mr. Woodhouse then came outside and started knocking down everybody in his way with an American knuckleduster (produced). Witness got hold of him, threw him down, and handcuffed him. He had the knuckleduster on his hand. It was made of brass, and was a very ugly-looking thing. Mr. Woodhouse admitted that the firing of the revolver was "a piece of wanton tomfoolery," but it was only a blank cartridge that he fired. He and the woman both denied having been drunk. The Mayor said it was the most shocking and disgraceful case he ever knew, and after the Magistrates had retired, the Mayor announced that Mrs. Little would be fined 15s. or 14 days; Mr. Woodhouse would be fined 4s., and in the event of his being brought up again he would be sent to prison, or bound over to keep the peace for a considerable time without the option of a fine, as the Magistrates were determined to protect the public.

[Mr. Woodhouse has written to us asserting that the statements made by the police were seriously exaggerated, and declaring positively that neither he nor his housekeeper was drunk. He was naturally excited and angry.]

Serious Charge Against a Chemist.

Robert Spencer, 38, chemist, of Birmingham, formerly of West Bromwich, and Sarah Clancey, of Kingswinford, also formerly of West Bromwich, were remanded at West Bromwich on Monday last, charged with the murder of Eliza Ann Evans, 26. The deceased, with whom, it is alleged, Spencer was on intimate terms, disappeared from her home eight years ago, and has not been seen since. The police found a locket she was wearing at the time she left home in the possession of Clancey, who has made a statement implicating Spencer. The story is that the girl died at Clancey's house after an illegal operation. The body was buried in the garden, and subsequently dug out and burned. Spencer, who is now married, admits he was formerly intimate with the deceased, but he denies any complicity in this case. He is well known throughout the district, and the deceased was very respectably connected. Application for bail for the prisoners was refused.

The Chemists' Association (Limited).

The ordinary general meeting of the Chemists' Association (Limited) was held on Friday, March 3, at the company's offices, Curtain Road, London, E.C. The Chairman, Mr. Martin Magor, presided.

In moving the adoption of the report (which recommended a dividend at the rate of 7 per cent. per annum on the paid-up capital, and a bonus to all the members doing business with the Association of 3 per cent. upon purchases of drugs and sundries, and of 1 per cent. on those of patent medicines), the Chairman said that up to January 1, 1893, the date of the accounts, they had been in business only six months, and had not really done six months' business; for

during three weeks of July, whilst the affairs of the Association were in a state of transition, their travellers were taken off their grounds, and their returns were consequently lessened. They were also opening new ground in the South and East, and looked hopefully forward this year to good business in this direction. Still, they were able to confirm the hope held out of paying a fair dividend and bonus, and also to carry a reasonable amount forward. He explained that according to the Articles of Association the distribution of profits is limited in the first instance to a dividend at the rate of 5 per cent. per annum upon the paid-up capital. The remaining profits are divided into three parts, one part only being applicable to a further dividend on the share capital, and the other two parts must be distributed amongst the members who have done business with the Association in proportion to the amount of their dealings. It would have been better if the extra dividend could have been distributed upon the trade done; but the bonus, as it is, is a satisfactory one. He gave reasons for hoping that profits would be greater in 1893 than in 1892. He regretted to have to report that their managing director, Mr. Leonard Walters, had been obliged to go to the South of Europe for the remainder of the winter. They hoped, however, that by taking this course promptly his health would be permanently re-established. Arrangements had been made by the Chairman in co-operation with the other managing director, Mr. Hole, to carry on the business during Mr. Walters's absence.

Mr. William Corbett (Bromsgrove) seconded the resolution, and congratulated the shareholders upon the result, which he considered was particularly satisfactory, bearing in mind the depression of trade.

The resolution was carried unanimously, the report was duly adopted, and the dividend and bonus were declared.

A shareholder inquired how many members of the Association were at present on the register.

The Chairman replied that he believed about 150.

On the motion of Mr. Ralph Walton (Maidenhead), seconded by Mr. Valentine Norman (Godalming), Mr. William Corbett was re-elected as a director. On the motion of Mr. Davey (St. John's Wood), seconded by Mr. Mann (Tunbridge Wells), the directors' remuneration for the ensuing year was fixed at the same rate as before. On the proposal of the Chairman, seconded by Mr. Woolley (Leicester), Messrs. Howard, Howes, and Walters were re-appointed auditors, and after votes of thanks the proceedings terminated.

The Removal of Trade Refuse.

At Tuesday's meeting of the St. Luke's (Middlesex) Vestry, held at the hall in City Road, under the presidency of Mr. Churchwarden Griffin, the Vestry Clerk (Mr. G. W. Preston) read a letter from Messrs. Thompson & Sons, chemists and druggists, of Worship Street, asking, as a matter of sanitation as well as of convenience, that their trade refuse be removed by the Vestry more frequently and at a reduced rate, seeing that they (the writers) paid their scot and lot in the parish like every other ratepayer. This was referred to Committee.

Wasting the Bergamot.

Ellen Aspin, a young woman, came before Mr. Makinson, the Salford Stipendiary, on Monday, charged with having attempted to commit suicide on Saturday night by taking a quantity of bergamot. There had been a quarrel at home between the prisoner and her father, and when the latter went to bed the daughter was seen to take something from a cupboard, go into the yard, and return to the house with an empty bottle, saying, "I have done it." She afterwards went into the yard again, where she was found lying on the flags, having taken a quantity of bergamot. They gave her an emetic and afterwards removed her to the hospital, where she recovered. The Magistrate remanded her for a day.

Unjust Scales and Weights.

At the Derby Police Court last week, James Spencer Scholes, chemist, Ashbourne Road, was summoned upon three counts—for having in his possession on February 14, for the use of trade, a pair of scales which were unstamped, a pair of scales which were unjust and false, and a number of weights which were also unjust. Albert Henry Rutherford spoke to visiting defendant's shop and examining the

scales and weights. One of the pairs of scales used for dispensing purposes was $3\frac{1}{2}$ grains to the prejudice of the purchaser, there being a piece of sealing-wax at the bottom of the pan. He examined twelve weights, and found that only three were correct, all the others being light. Two of the weights had been previously condemned. The weights were all in use upon the counter. Defendant said it was due to carelessness. The Magistrates fined defendant 5s. and costs for the unstamped scales, 10s. and costs for the unjust scales, and 20s. and costs for the defective weights, which were ordered to be forfeited. The total sum defendant had to pay was 2*l.* 17*s.* 6*d.*

Should Arrowroot be Analysed?

During the consideration of the contracts for supplies to the Holborn Union establishments for the next six months, at a special meeting of the Guardians on Tuesday, Mr. George Eade, chemist, of Goswell Road, called attention to the low prices at which arrowroot had been quoted. He said it was impossible to supply genuine arrowroot at 3*d.*, 3*d.*, 4*d.*, or even 5*d.* per lb., as had been quoted by some of the contractors. He hoped the supply would be analysed, to ascertain if it was potato-starch or actual arrowroot. A good deal had just previously been said as to the importance of pure milk for the poor, and he was distinctly of opinion that it was equally necessary that the sick poor should have pure arrowroot. (Hear, hear.) When the supply (which had been accepted) at 3*d.* per lb. was delivered he would move that it be analysed.

Sale or Return.

In the Westminster County Court on March 3, the case of the Zola Company v. Austin, remitted from the High Court, was heard by Judge Bayley. The plaintiff company sued to recover 11*l.* for goods sold and delivered to the defendant, who carries on business at Teignmouth. Counsel for the plaintiff explained that his clients were manufacturers of a special belt for ladies, which was largely sold by chemists and drapers. In September last the plaintiffs' traveller called on the defendant and procured from him a signed order for a quantity of the goods to the extent of 11*l.* The goods were delivered together with an invoice, but when payment was asked for the defendant sent the goods back, and wrote a letter saying that he had only had them on trial as samples, and that as he found they were not suited to his business he returned them. The plaintiffs disputed any such terms and declined to take them back, and, as the defendant persistently refused to pay, the present proceedings were commenced. The plaintiffs' traveller was positive that he never made any arrangement for sale or return. The order was quite unconditional except that it was arranged to appoint the defendant sole agent for the district, and in pursuance of that arrangement a number of advertisements were inserted in the local paper at the expense of the plaintiffs.

Mr. Christopher Battie, managing director of the plaintiff firm, said he would never have accepted an order on such terms as those alleged by the defendant.

The defendant then swore that he gave the order conditionally upon his being entitled to return the goods if he could not sell them. He was never very anxious to take up the sale of the article, but the traveller pressed him so hard for an order that he at last gave one. He wanted to submit the article to his wife for her approval, but the traveller asked him not to do so as the specimens which he had with him were dirty and out of order, but he (the traveller) would send him some good samples.

His Honour said there was no difficulty in deciding this case, as there was a written order signed by the defendant, and it was impossible for him now to attempt to go behind it. The terms of the order were quite unconditional, and it was clear, therefore, that the defendant was liable. Judgment would be for the plaintiffs for the amount of their claim, with costs.

Defendant: I have suffered enough loss in being taken away from my business.

His Honour: You have brought all that upon yourself, as you might have known that you were liable under the terms of the written order.

Disinfectants for Vestries.

The Camberwell Vestry invites tenders for the supply of carbolic acid, powder, deodorants, and disinfectants for the ensuing six months. A special meeting of the Sub-Committee will be held at the Vestry Hall on March 14 at 4.30 p.m., when contractors or their agents are requested to be present. Forms of tender can be obtained at the Works Department, Vestry Hall, and no tender will be received except on such form. Persons tendering will be required to give an assurance to the effect that they pay trade-union rates of wages, and that they observe the recognised hours of labour.

At the meeting of the Holborn Board of Works on Monday night the Sanitary Committee reported that they had received and considered tenders for the supply of disinfectants for the ensuing twelve months from Mr. J. Sellers, 57 Farringdon Road; the Sanitas Company (Limited), Bethnal Green Road; Messrs. Corbyn, Stacey & Co., High Holborn; Messrs. Hopkins & Williams, 16 Cross Street, Hutton Garden; Mr. F. C. Calvert, Manchester; Mr. Francis Poole, Charles Street, Hutton Garden; Mr. Charles J. Rees, 93 Gray's Inn Road; Messrs. Adcock, Easton & Co., Chenies Road. They recommended that the tender of Mr. Francis Poole, Charles Street, Hutton Garden, be accepted. This recommendation was unanimously adopted.

Labelling Laudanum.

Bertha Harmer, a domestic servant at Addiscombe, was charged before the Croydon Magistrates, on March 3, with attempting suicide by taking laudanum. She took it for love. She told a constable that she got the laudanum from Mr. Rhodes, chemist, Cross Road. The Magistrates remanded the girl for a week, and then called up Mr. Rhodes and asked him if he sold laudanum to the defendant.

Mr. Rhodes replied that he believed so, but only one or two pennyworth.

His attention was drawn to the fact that there was no "poison" label on the bottle, and he replied that there were two or three people in the shop at the time, and he could not say whether he put the label on or not. He always did so, and, of course, it might have been taken off.

Mr. Seale remarked that Mr. Rhodes must perfectly well know he was not allowed to sell poisons without a label. He did not know whether there was a case against him; he supposed it would be for the police to inquire and report it to the Commissioners, and decide whether they would take steps against him. The bottle apparently came from Mr. Rhodes, and he did not deny it.

Mr. Rhodes: Oh, no.

Mr. Seale: There seems to be some question whether it was labelled or not, but at present the only label is one of "Essence of Vanilla."

Inspector Lemmey said the police would inquire and report.

An Overdose of Paregoric.

An inquest was held at Portsmouth on Monday, touching the death of the two-months-old daughter of Mr. W. J. E. Hall, a clerk. The child had a slight cold, and the mother obtained two bottles of medicine from Mr. Haggis, chemist, Fratton. The first bottle was obtained on Sunday week, and the child took all of it except two or three spoonfuls. The second bottle was purchased on Friday evening, the mother saying that the other had done the child no good, and the first dose was administered to the child on the next morning. Another dose was given on Saturday night. The infant woke once during the night, but at 7.45 next morning was found with her face covered with froth and quite dead. Dr. Norris, who was called in, stated that the bottle was not labelled "Paregoric" or "Poison," but he judged from the smell that it contained paregoric. The dose, half a teaspoonful, would be a proper dose for a strong child, but the infant in question was delicate from birth. He attributed death to asphyxia from an overdose of paregoric. Verdict accordingly.

Institute of Chemistry.

The annual general meeting of the Institute of Chemistry of Great Britain and Ireland was held last week at 30 Bloomsbury Square, W.C., the premises recently acquired by the Institute.

The report of the Council showed that the present

strength of the Institute is 718 fellows, 110 associates, and 109 students. Amongst other matters referred to were the following:—A small but properly-equipped laboratory will be erected at the back of the new house, and it may be ready for the practical examination in July next. A small committee, consisting of the President, with Messrs. M. Carteighe and D. Howard, has been appointed to confer with the solicitors of the Institute with a view to the thorough revision of ambiguous and imperfect by-laws. Dr. J. Bell, C.B., had an interview with one of the principal officers of the Local Government Board, who stated that the Board, as a general practice, did not approve of the combination of the appointments of medical officer of health and public analyst. The Council is engaged in drawing up a code of professional ethics. The report having been approved, the Council and officers for the ensuing year were elected, and the President, Dr. William A. Tilden, F.R.S., delivered an address in which, after referring to the satisfactory progress which had been made by the Institute during the past year, he proceeded to explain the new curriculum recently adopted by the Council for the training and examination of associates and the proposals which had been brought forward by the censors with the object of regulating the professional conduct of members of the Institute.

Proposed Conference at Manchester.

At a meeting of the committee of the Manchester Pharmaceutical Association, held on Wednesday night, arrangements were completed for holding a conference of the drug-trade in Manchester on March 22, to discuss matters relating to trade organisation and trade politics. The meeting is to be held in the Memorial Hall, and all the registered chemists and druggists of Manchester, Salford, and the surrounding district will be invited. It is hoped that Mr. Cross, of Shrewsbury, Vice-President of the Pharmaceutical Society, may be able to attend and take part in the proceedings.

The Alleged Murder of a Chemist.

The boy Williams, who was charged with the murder of Mr. Neilson, chemist, Blackburn, his former employer, is now in Walton Gaol, Liverpool. He makes no reference to the coming trial, but has again denied that he had any part in the shooting of a boy, reference to which was made when the prisoner was before the Magistrates, and he also adheres to the former statement that the wound on Neilson's head was caused by his falling against the counter.

A Chemist's Debt.

On the application of the Mutual Loan Fund Association, in the Westminster County Court, his Honour Judge Bayley on Tuesday made an order of committal against Mr. Phillips, a chemist, carrying on business at White's Row, Spitalfields, if a debt were not paid in a month. It was stated by the plaintiffs that there had been fifteen judgment summonses taken out in this case, and that the defendant always paid when an order of committal was made against him.

Irish News.

Mr. Draper's Will.

An action in regard to certain dispositions in the will of the late Mr. H. N. Draper, pharmaceutical chemist, of the firm of Bewley & Draper, came before the Master of the Rolls, in Dublin, last week. It transpired that Mr. Draper's assets amounted to over 93,000*l*.

First Aid to Mr. Davitt.

Mr. Timmin, pharmaceutical chemist, of Navan, has awakened to find himself famous. During a "debate wid fists" a few days ago, at the County Meath elections, Mr. Michael Davitt came in for a nasty scalp-wound. Mr. Timmin came to the rescue, bound up the patriotic patient's head with cold lint, and advised him to go to Dublin to get it dressed. Mr. Timmin, giving evidence in the case at the Courts, said he had often seen a worse cut in Navan.

Tenders Wanted.

The Boards of Guardians of the undermentioned Poor-law Unions and dispensaries are open to receive tenders for the supply of drugs and medical and surgical requisites. The tenders will be considered on the dates appended:—Baileborough, March 13; Borrisokane, March 13; Kilkeel, March 13; Toberecurry, March 13; Tulla, March 14; Sligo, March 14; Granard, March 16; Croom, March 16; Clones, March 16; Rathdrum, March 17; and Roscommon Infirmary, March 18.

A New Pharmacy.

Mr. H. Lancashire, M.P.S.I., of Ballymena, has had a handsome new pharmacy erected for him at 82 and 83 Church Street, Ballymena. The fittings are in the most modern style, and were made by Mr. Alexander Mitchell, Belfast.

Scottish News.**Marriage-contract Claims.**

In the Court of Session on Saturday last decision was given in three actions between Dr. John Chalmers, some time a chemist in Stirling, afterwards residing in New Zealand, and now at Bridge of Earn, Perthshire, and his marriage-contract trustees. In the first action Dr. Chalmers sued for count and reckoning, or for payment of 2,000*l.* His wife died in 1891, and it was maintained that he was entitled, there being no children of the marriage, to half of her movable estate, without prejudice to the right he had under the marriage contract to a life-rent of the whole estate. Lord Kyllachy decided that the plaintiff was entitled to the rights he claimed, and he ordered the defendants to lodge an account of their intromissions.

In the second action the trustees sued Dr. Chalmers for 591*l.*, said to have been lent him by his wife, and in this case a proof was allowed.

The third action, raised by Dr. Chalmers, had reference to an insurance policy which belonged to the husband, and over which the trustees claimed a right of detention, founded on the averment that Mrs. Chalmers had paid certain premiums out of funds which she ought to have conveyed to her marriage-contract trustees. Lord Kyllachy decided this claim in favour of Dr. Chalmers.

Dumfries Chemists in Conference.

A meeting of Dumfries chemists was held on Friday, March 3, to discuss several trade matters. It was attended by all the chemists of the town with one exception, and it was resolved to hold such meetings much more frequently in future. Mr. Allan was appointed Chairman, *vice* the late Mr. Ewing, and Mr. Sutherland Secretary to the Association.

The sale of ginger-wine essence was discussed, and the reply of the Board of Inland Revenue, stating that in future all chemists who prepare this article must hold a compounder's licence, and all who sold the article must have a spirit licence, was considered a grievance of such magnitude as to require the appointment of a sub-committee to draw up a report thereon and to transmit questions on the matter to the M.P.'s for the burgh and the county, and also to lay the matter before the Scottish Executive for their consideration. There is a very large demand for the ginger-wine essence in the town and neighbourhood, and as most of the chemists hold considerable stock, the restriction of the sale means the loss of another profitable extra and a hardship to the public, who will not be able to get the essence except from the licensed traders.

Sunday Hours.—It was unanimously agreed to by every chemist in the town that on and after April 1, 1893, the opening of the shops on Sunday between 1 and 2 P.M. be discontinued, and that the hours of opening be from 10 to 11 A.M. and 7 to 8 P.M., and that printed notices to that effect be published, and a copy thereof sent to all the medical men in the town and neighbourhood. This change will be a great boon to all the chemists, especially in the summer months, as it will enable them to get out into the country during the whole of the best part of the day.

Electric Light in Pharmacy.

Messrs. James Hardie & Son, of Dundee, taking advantage of the new municipal electric supply, have their pharmacy in High Street now very brilliantly illuminated, this being one of the first ventures of the kind by Scotch chemists. The shop is an unusually long one, and being the principal pharmacy in the city, and occupying a prominent position, the proprietors have always had some difficulty to light it effectively. As to the effect now produced, Mr. J. M. Hardie, the junior partner, remarked to a CHEMIST AND DRUGGIST representative:—"We have had the current on now for nearly a week, and our anticipations of its superiority over gas have been fully realised. With practically the same candle-power the shop is very much better lighted, and we have a much purer atmosphere to breathe." The fittings which the firm have put in consist of three 50-candle lamps, suspended from the roof and placed at equal distance along the centre, with shades of a very pale colour which give additional richness to the light. They have also two standards on the counter, with 16-candle lamps and white shades, and in the window two 32-candle lamps of obscured glass, placed close up to the show carboys. This has a fine effect from the outside. The firm are to judge of the efficiency of the present installation before extending it to their laboratory and to the basement, which is somewhat extensive.

Science Appeals to Law against Theology.

Mr. Johnstone, a lecturer on chemistry in Queen Margaret College, Glasgow, has commenced an action for slander against Sir Arthur Grant, of Monymusk, Aberdeen. Mr. Johnstone had formerly been employed by the Aberdeen County Council to deliver lectures to farmers and others on soils. The defendant, when opening a Free Church bazaar, is alleged to have commented on one of Mr. Johnstone's lectures, and said he had used his opportunity for preaching a blasphemous, rationalistic doctrine, tending to upset the Bible and to upset things which old-fashioned people had believed in for some little time, and which they hoped to believe in for a good while yet; and that if the Churches, instead of quarrelling so much, would league themselves together to counteract such men and such views it would be very much better than the present state of things. Mr. Johnstone alleges that he lost his position as a lecturer in consequence of these remarks, which he avers were false, calumnious, and malicious. He claims 1,000*l.* damages. The defender admits the substantial accuracy of the report of what he said, but claims that his remarks were fair comment and criticism on the lecture he heard, and that he spoke without malice.

The Advertiser not Assessable.

At a Lands Valuation Appeal Court, held in Edinburgh on Tuesday, Messrs. J. S. Fry & Sons, Bristol, appealed against a decision of the Magistrates assessing them, under the Lands Valuation Act, as tenants and occupiers of advertising-boards, at High Calton, Edinburgh, the amount of the assessment being 40*l.* yearly. Messrs. Fry admitted that they had entered into an agreement with the owner of a tenement for a lease of three large boards on the roof of the tenement at a rent of 40*l.* per annum, but they contended that they were not occupiers or tenants, nor assessable under either the Lands Valuation Acts or the Advertising Stations (Rating) Act.

After hearing counsel, the Court sustained the appeal, on the ground that the express direction of the Advertising Stations (Rating) Act was that the advertiser should not be entered on the roll, but the person who permitted him to advertise.

French Pharmaceutical News.

(From our Paris Correspondent.)

FIRE AT A PHARMACY.—M. Barbe's pharmacy, 91 Boulevard Voltaire, Paris, was completely destroyed by fire last week. An assistant was distilling alcohol when the temperature, becoming too high, caused the still to explode. The chemist was slightly burned, and the flames rapidly attacked the premises, with the result stated.

A STUDENTS' CAVALCADE.—On Thursday, March 9, being Mid-Lent, the students divided the honours of parading Paris with the washerwomen, who have hitherto looked upon this day as peculiarly their own. Pharmacy was represented by a group of apothecaries in costumes of the seventeenth and eighteenth centuries, the representatives of medicine being similarly attired. The details of the procession were well carried out, and the cavalcade was warmly applauded by many thousands of onlookers as it passed along the boulevards and principal streets.

ILLEGAL PRACTICE OF PHARMACY.—The Tenth Tribunal Chamber ordered, on Friday last, the immediate closing of a pharmacy at 26 Galerie du Baromètre, Passage de l'Opéra, Paris. The business was conducted by a M. Pothonier for the account of a carpet-dealer named Leca. The former was, however, only a pharmacist of the second class, and had not the right to exercise his profession in Paris. He was condemned to fifteen days' imprisonment and to a fine of 500f. Leca, the real proprietor, had also to pay a similar fine. The prosecution was conducted by M. Clément, police commissary.

THE RESISTANCE OF GOATS AND CATS TO MORPHIA.—Some interesting facts have been recorded by M. Guinard, laboratory director at the Alfort Veterinary School, on the resistance shown by certain animals to the action of hydrochlorate of morphia. The resistance of the feline race to morphia is well known; it appears that in goats it is still more marked. According to M. Guinard, a she-goat can support a dose of 10 grammes of hydrochlorate of morphia without being affected by the narcotic; the animal merely shows a slight disposition to become excited. The action of the alkaloid becomes fatal at a dose of 30 centigrammes per kilogramme of the animal's weight. According to the same calculation, a dose of $\frac{3}{10}$ milligramme of hydrochlorate of morphia per kilogramme of weight would produce the same effect in a man. M. Milne Edwards had seen goats browse on hemlock with delight and without appearing indisposed. Whatever may be the dose of morphia absorbed, these animals never show signs of intoxication.

CUSTOMS DIFFICULTIES.—The latest article to attract the attention of the lynx-eyed Paris officials of Customs is Elliman's Universal Embrocation for human use. The Royal Embrocation for animals was duly admitted some years ago, after being officially passed by the Paris School of Pharmacy, and the recent suddenly-acquired taste of French youth for athletic exercises caused a demand for the "human" article. It came through the Customs for a time all right, but suddenly a keen official discovered the slight difference and stopped the importation. The School of Pharmacy have the matter in hand now, and they will probably, ultimately, make but little difficulty. The usual course taken by the School is to confer with one of the most prominent English pharmacists in Paris concerning any new speciality that a manufacturer may seek to introduce, and a good deal of unrequited service has been rendered in this way. It may also be mentioned that Dr. J. H. Barnard, an English physician who has rapidly risen in the front rank here, has, in the capacity of secretary of the Anglo-American Medical Society, not unfrequently given manufacturers of pharmaceutical specialities and products a helping hand in getting their products into France. The authorities are doubtless right in being strict about the introduction of foreign medicaments, but they seem unable to learn that by making too much difficulty, the flow of travellers in search of health may be turned to other more enlightened countries.

ENGLISH PHARMACY IN PARIS.—Reference has already been made in THE CHEMIST AND DRUGGIST to the scarcity of English pharmacists in Paris holding the diploma of "Pharmaciens de Première Classe." As a matter of fact, they can all be counted on the fingers of one hand. Out of these, two are hale and hearty with more than threescore and ten years of well-spent lives behind them, and a third holds a medical degree. The latter, Dr. Douglas Hogg, remarked a few days ago, in course of conversation, to the representative of THE CHEMIST AND DRUGGIST that he could provide a good future to a smart English chemist holding diplomas from the Paris School of Pharmacy; but, he added, men with the right stuff for passing what, especially on account of the difficulty of the language, is a

stiff examination seem to prefer England as a place of permanent residence—even to the West-end of Paris. As a matter of fact, it appears that the French members of the profession are exceedingly jealous of the prosperous businesses conducted by the few Englishmen here. In the best parts of the city visitors will remark that most pharmacists announce themselves by large letters on their windows as "English and American." This is somewhat of a delusion. When they have a foreign prescription to make up they invariably send to one of their envied *bonâ-fide* English colleagues. Generally the request is to have the medicine put up in plain bottles at cost price, but the more polite merely ask for the weights, &c., to be transcribed into Codex quantities. The English compound tinctures and other things generally puzzle the native dispensers a good deal, while it is undoubtedly to the advantage of patients that no risk should be incurred in making up medicine.

PARLIAMENTARY NEWS.

Preferential Duties in America.

In the House of Commons, on Tuesday, Sir E. Grey (Under-Secretary for Foreign Affairs), in answer to Mr. H. R. Farquharson, said: In the Spanish West Indies, Brazil, and San Domingo the produce of the United States is admitted at a more favourable rate than the produce of the United Kingdom. Brazil and Portugal grant more favourable treatment to goods from each other than they extend to like produce imported from elsewhere.

Colonel Howard Vincent asked whether any efforts were being made to induce Brazil to give England equal advantages with the United States.

Sir E. Grey: Efforts have been made to reopen negotiations with Brazil, but at present Brazil has not been willing to respond.

The Duty on Imported Chocolate Confectionery.

On Monday night, in the House of Commons, Mr. MacDonald asked the Chancellor of the Exchequer whether the tariff-duty of 2*d.* per lb. on the total weight of all cocoa or chocolate confectionery imported from France, Germany, or elsewhere had been, and was now being, paid; or whether it was the fact that, contrary to 39 and 40 Vict., c. 35, the duty was imposed only upon an assumed percentage of the dutiable article in the imported confectionery, and that the assumed percentage took no account of the great waste of the dutiable article in process of manufacture, which loss British manufacturers had to bear.

The Chancellor of the Exchequer stated that in some cases, especially where the quantity of the dutiable article bore a small proportion to the total quantity of the confectionery, the duty was charged only on the actual quantity of the dutiable article. That quantity, however, was not assumed, but was ascertained by analysis. The practice was held by the Customs authorities to be covered by the Act 39 and 40 Vict., c. 35. With regard to the last part of the question, he would point out that the British manufacturer as a rule paid duty only on the raw material, which was only half the duty on the manufactured article, so that he was probably at no disadvantage compared with the foreigner.

A New Customs Duty on Confectionery.

The Lords of the Treasury have ordered that, from February 6, all importations of confectionery in the composition of which spirit has been used shall be subject to a duty of $\frac{1}{2}$ *d.* per lb. in addition to any duty with which such confectionery—as chocolate, &c.—may already be chargeable, while importations of confectionery containing an appreciable amount of spirit—such as Easter-eggs, &c.—are to be specially reported to the Board of Customs, and duty is to be charged on the actual amount of spirit discovered.

Exemption from Jury Service.

Viscount Curzon's Bill for the exemption of members of fire-brigades from jury service was down for second reading in the House of Commons on Wednesday.

Upon the motion for the second reading of the Bill, The Attorney-General said that, seeing that other classes of persons were equally entitled to exemption from serving as jurors, and that the principle of exemption would have to be more widely extended than the present Bill proposed, he moved that the debate be now adjourned.

Viscount Curzon appealed to the right hon. gentleman and to the House to allow this Bill to proceed. If the Bill were passed, it would be the first recognition by Parliament of the services rendered by those who were engaged in saving life and property in the fire-brigades of the country. As it was the general feeling of the House that this was a matter which should come before Parliament in the manner now proposed by this Bill, he hoped that it would be allowed to pass its second reading.

The motion for the adjournment was then put and carried, and the debate was adjourned.

The Winter Session.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.

EVENING MEETING.

A GOOD audience assembled in the Lecture Theatre of Bloomsbury Square on Wednesday evening to hear Professor Dunstan's lecture on

ACONITE ALKALOIDS.

The exhibits on the occasion comprised living specimens of *Aconitum Napellus*, from Mr. E. M. Holmes's garden, with herbarium specimens of the same plant grown in England and Germany, and also of allied species of the genus. There were also upon the table several kinds of root, and a magnificent collection of the principles from the drug, amongst them particularly fine specimens of crystallised aconitine and its salts, aconine, isoaconitine and their salts, both dry and in the process of crystallisation. On his arrival in the Lecture Theatre, Professor DUNSTAN was received with hearty applause. He at once set to work, speaking of the use of aconite as a medicine amongst the Greeks, and even in Early Britain, and quickly passed to the chemistry of the drug, stating that T. B. Groves was the first, in 1860, to extract a crystalline alkaloid from aconite; and in succession the work of Alder Wright, Jürgens, and John Williams was referred to, thus bringing the *resumé* down to 1890, when the research was commenced at Bloomsbury. The subject and results of this research were divided into three heads: *first*, the practical importance to pharmacy of research in regard to the active principles of the drug; *second*, the chief points which have been elicited by it; and, *third*, how far the information supplied by the research satisfies the deficiencies hitherto experienced. On the first division the lecturer pointed out how uncertain has been our knowledge of the amorphous body called aconitine, and the equal uncertainty regarding the strength and action of galenical preparations of aconite. Any chemical research which would determine what are the chemical principles of the root and define their properties would, he claimed, be indirectly beneficial to pure pharmacy. The sequence of the research was then sketched, and, showing a flask containing a layer of a brown varnish substance inside, he explained that that was the total alkaloids from *Aconitum Napellus* root, and the substance from which crystalline aconitine has been prepared. He then showed crystals of that alkaloid on the screen, thus exhibiting the hexagonal form of the crystals. The hydrobromate in square plates was also exhibited. As to the alkaloid, Professor Cash has found it to be the most potent specimen of that substance he has examined; it is intensely toxic, and probably $\frac{1}{50}$ grain would kill—certainly $\frac{1}{30}$ would. Next, Professor Dunstan stated that the research has proved beyond doubt that authentic *A. Napellus* does yield aconitine, and from that he passed to commercial aconitines—mere mixtures, most of them—and aconine, a natural constituent of the root, as well as a product of the hydrolysis of aconitine. Probably it represents a stage in the natural formation of aconitine. The constitution of both these alkaloids, as far as has been

determined, was then spoken of, especially the remarkable fact that, by the loss of a benzoyl group, aconitine, one of the most poisonous substances, becomes one of the most harmless, and the lecturer hinted that the work now going on will throw some light on the problem underlying this change. The other principles obtained from the root are isoaconitine (first called napelline, but, being isomeric with aconitine, now renamed), homoisoaconitine and "x." The quantity of aconitine in the root seems to be extremely variable. The lecturer referred fully to the properties of isoaconitine, contrasting the remarkable differences in properties between it and aconitine, and added that evidence is being accumulated which will show that, though isomeric, there is a wide difference in the constitution of the two bodies. The gold-chloride compound of isoaconitine is the starting-point: this, instead of being yellow in colour, as double salts of gold and organic bases are, was found to be white, and investigation showed that an AuCl_2 group really goes into the alkaloid molecule, pushing out a hydrogen atom. The differences between the aconitine gold chloride and the aurochlor derivative of isoaconitine, as shown in their crystalline forms, were exhibited by the lantern-microscope, and the whole properties of the less toxic principle were referred to in detail. There is at least one ("x"), perhaps two, other amorphous alkaloids in the root. In concluding, the lecturer summarised the results of the research substantially as has been described, and thanked Mr. E. F. Harrison for manipulating the lantern. There was hearty applause several times during the lecture, and especially at its conclusion.

The PRESIDENT (Mr. M. Carteighe), in thanking the professor, congratulated him and his colleagues on the success which they had achieved, and stated that a good deal had yet to be done. He also claimed that the results had a direct bearing upon precise pharmacy—the pharmacy of the future, that in which definite chemical products will be employed to produce specific therapeutic results. He was also of opinion that it would be better for the laboratory to devote several years to the exhaustion of a subject such as this than to be publishing every month petty papers on petty subjects connected with pharmacy.

The VICE-PRESIDENT (Mr. W. Gowen Cross) seconded the vote of thanks, and Mr. MARTIN (Newcastle-on-Tyne) supported it. After the applause subsided, Professor DUNSTAN replied, and, at the suggestion of Mr. Martin, stated that it was still impossible to say what percentage of aconitine exists in the root. He also pointed out the error in Mr. A. H. Allen's method for estimating crystallised aconitine in amorphous residues—the error arising from the fact that both aconitine and isoaconitine yield benzoic acid on saponification, so that the benzoic acid gave no true indication of the quantity of aconitine contained in a residue.

At the request of the President, Mr. HOLMES added some remarks on the botanical side of the subject, advocating a more accurate pharmacopoeial description of the plant than is at present given. The plant flowering in May and June is *A. Napellus*; other species flower later, so that the early-flowering plant is the one to be described.

The PRESIDENT then called attention to a "smasher" for bruising roots and barks. It resembles two heels of a pair of mountaineering-boots, the upper one with a handle, and it is a very effectual piece of apparatus. Professor Green will give a lecture in April on a subject to be announced.

CHEMICAL SOCIETY.

THE meeting held last week was intensely philosophic. After some business preparatory to the anniversary meeting which will be held on March 27, Dr. J. H. GLADSTONE, the Chairman, intimated that a change would then be proposed in by-law 11 making one meeting at Easter the rule, and a change in by-law 13 to require fourteen days' notice of any proposal to alter a by-law. He also spoke of the proposed memorial to Lawes and Gilbert, and this matter was referred to the Council.

Dr. W. H. PERKIN was the first contributor to the proceedings, his paper being an account of the magnetic and specific rotations of ethylene oxide and other similar bodies, Dr. H. E. ARMSTRONG followed with "Notes on Optical Properties as Indicative of Structure." There was an hour of this, and it was interesting indeed, though deep—deep. First

speaking in regard to the question of colour Dr. Armstrong called attention to the recent observation that when phenolphthalein is treated with an alkali, whereby colour is produced, it is changed from a lactone to a carboxylic compound, and therefore a body of the quinonoid type, that being the structure which he considers all coloured bodies to have. Incidentally he discussed the phthaleins, as well as fluoresceins, and said in regard to the latter all coloured substances ought to exhibit fluorescence, and if any do not that is a proof that the fluorescence is absorbed by the solvent of the substance. Further he defined a quinonoid compound as a hexaphen— that is, an unsaturated ring-compound of six "elements," two of which are CR". After this portion of the subject Dr. Armstrong criticised some results of Dr. Gladstone's, published many years ago, and also referred to recent determinations on the molecular refraction and dispersion of nickel carbonyl and iron carbonyl. Studying the figures given for these Dr. Armstrong has come to the conclusion that these bodies are compounds of the benzene type, and that their constitution may be represented by the formulæ suggested by Mr. Mond—viz.:—



The molecular refraction of the latter has been found to be 67.4; calculated on the above type it is 67.6, so that Dr. Armstrong's theory hits the mark pretty closely. These are mere points from the paper, but they sufficiently show that it is one which deserves careful reading when published.

Professor PERCY FRANKLAND followed with a paper of a similar character on "The Etherial Salts of Active and Inactive Glycerine." He and Mr. J. Macgregor have for the first time made the esters of the first four alcohols. The primary alcohol-esters are made by heating the primary alcohol with the glyceric acid in sealed tubes to 180° C.; the secondary by dissolving the alcohols in the acid and saturating with hydrochloric-acid gas, then neutralising with sodium carbonate, and distilling. The products had been examined for refractive power and other constants. By the time that this paper was read the meeting was as limp as a drowned dog, and took the following papers as read:—

"The Interaction of Alkali-cellulose and Carbon Disulphide. Cellulose Thiocarbonates." By C. F. Cross, E. J. Bevan, and C. Beadle.

"A New Atomic Diagram and Periodic Table of the Elements." By R. M. Deeley.

An extra meeting of the Society will be held on Friday, May 5, the anniversary of the death of A. W. von Hofmann, when addresses will be delivered by the Right Hon. Lord Playfair, K.C.B., F.R.S., V.P.C.S.; Sir F. A. Abel, C.B., F.R.S., V.P.C.S.; Dr. W. H. Perkin, F.R.S., V.P.C.S.

SOCIETY OF CHEMICAL INDUSTRY.

LONDON SECTION.

THIS Section met on Monday evening, under the presidency of Mr. Wm. Thorp, B.Sc. The first paper read was on

EXPERIMENTAL FILTER-PRESSES.

By C. C. Hutchinson.

The author spoke at considerable length on the conditions of filtration, pointing out that in the majority of cases the filtering medium is the primary filter, and that subsequently the deposit itself acts as a filter, and is probably a more efficient filter than the primary one. With such substances there is generally little difficulty; but filtration of mixtures of colloid or slimy bodies in the presence of solids, and of such things as mixtures containing ferric hydroxide is exceedingly troublesome, and requires special provision in any experimental apparatus. Thus, in the case of ferric hydroxide and similar precipitates, it is when the deposited layer reaches a certain thickness that filtration stops, and in a proper filter-press provision has to be made for ensuring that that thickness will not be exceeded. Altogether there are five different kinds of filtration (including dialysis) to be provided for. Mr. Hutchinson, who, we may say, is a partner in the firm S. H. Johuson & Co., engineers, Stratford, then described the

experimental filter-press which he has designed. In this the metal used is an aluminium-bronze containing 10 per cent. of aluminium. This material has great resisting-power to acids and alkalis, and is besides of great strength. The plates used are made of celluloid, and the ordinary ones fit into rings of aluminium-bronze. They are provided with an orifice, in the centre, through which the liquid passes from chamber to chamber. For fine precipitates shallower plates are used, and these, like the others, are circularly corrugated, the channels meeting at a common outlet provided with a tap. For dialysis the plates are provided with grooves arranged in maze-like fashion, so that the water circulating through the grooves travels through many hundred inches. Filter-presses with this dialysing arrangement are used in the stockyards of Chicago for separating the albuminoid bodies from brine, so as to utilise the brine over again while the albuminoids can be profitably disposed of. The presses work satisfactorily.

In the course of discussion several objections were urged against the celluloid—e.g. that the camphor may evaporate, leaving it spongy, and that it may be attacked by acids or alkalis. The aluminium-bronze, Mr. HAMILTON thought, might be attacked by acetic acid and ammonium acetate, which, of all chemicals, are the bugbears to copper-apparatus makers. Mr. HUTCHINSON satisfactorily disposed of these objections—the celluloid has been in use for three years, and the aluminium-bronze for two, and they have exhibited surprising resistance. Replying to a vinegar-manufacturer, he said that in filtering vinegar, no matter how bright it might be when it came through, there was often contamination with yeast-spores, and the vinegar became cloudy in a day or two. Filtration was no remedy for that—the only thing was to Pasteurise the vinegar.

SOCIETY BUSINESS

Mr. THORP intimated that he had been renominated Chairman for another year, and Mr. Heron was renominated Secretary of the Section.

The Council of the Society desired to appoint a committee to attend to the revision of Patent Laws, and upon this Sir H. E. Roscoe and a few other leading chemists were willing to act. The Section had to appoint three gentlemen, and the following were nominated:—B. E. R. Newlands, O. Guttman, B. Redwood, J. Friswell, C. C. Hutchinson, and A. J. Salamon. A ballot was taken, and later in the evening it was reported that Messrs. Newlands, Redwood, and Hutchinson had been elected.

BITUMINOUS COAL.

Mr. WATSON SMITH submitted further notes on the peculiar Japanese coal which he has reported upon more than once. It contains 10 per cent. of bitumen, and his endeavour in the present note was to throw some light on the formation of petroleum. His results tended to show that that useful body is formed in the coal-measures. On distilling the bitumen he obtained fractional products, some of which very closely resembled petroleum, especially those which boiled above 300° C., and by Helbing and Passmore's method he obtained distinct evidence of phenols in the distillate. Aromatic hydrocarbons were also obtained such as have been found in crude petroleum. The inference which we gathered from the communication is that bitumen is, as it were, petrified petroleum.

In the discussion on this paper Mr. CRESSWELL said that so far as the United Kingdom is concerned petroleum is only found in Ireland, but Mr. SUTHERLAND said that it had also been found at Broxburn, in Scotland, and he had seen it. Mr. MACEWAN added that he had also seen petroleum obtained from coal-mines in the North of England. Mr. SMITH, in reply, said it was a mistake to think that petroleum was not found in England. Young's celebrated experiments were commenced with Derbyshire petroleum.

The way was now clear for the discussion of Mr. Warington's paper on the detection of

LEAD IN CITRIC AND TARTARIC ACIDS.

It will be remembered that in the paper communicated last month Mr. Warington critically examined all the pharmacopœial methods of testing the acids for lead, and found them to be more or less faulty. In regard to the British

The Chemist & Druggist

SUPPLEMENT.

Businesses Wanted
Businesses for Disposal
Premises to Let
Auction Sales

SATURDAY, MARCH 11, 1893.

Partnerships
Situations Vacant
Situations Wanted
Miscellaneous

A Copy of this Supplement is inserted in every number issued of "The Chemist and Druggist."

PLEASE NOTE.

ADVERTISEMENTS for this Supplement must be received at the Office, 42 Cannon Street, E.C., not later than 5 o'clock on Thursday Evenings, for insertion in the current week's issue.

Advertisements must be prepaid. Remittances by post may be made in stamps, or by postal order made payable to "EDWARD HALSE," and crossed MARTIN'S BANK (LIMITED). To ensure prompt attention address all communications, endorsed "Supplement," to the PUBLISHER of "THE CHEMIST AND DRUGGIST."

OFFICES: 42 CANNON STREET, LONDON, E.C.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—£800.—LONDON, W.—Good-class Retail and Dispensing Business; returns over £800 yearly, with good profits; full prices; well-fitted shop and good stock; very moderate rent; price £750.

2.—£1,100.—LONDON, W.—Great thoroughfare; Dispensing and Family Business; old-established; returns between £1,000 and £1,100 yearly; well-fitted shop and large stock; very good house; good opportunity for a pushing young man; valuation with £350 goodwill.

3.—£800.—LONDON, N.W.—First-class Dispensing Business in a good residential locality; easily expanded into more general business; handsome corner shop and good house; price and general particulars on application.

4.—£1,000.—SUBURBAN.—Good-class Business; Retail and Dispensing; neighbourhood rapidly expanding; well-fitted shop; returns £1,000 yearly, very profitable; comfortable house; immediate cash purchaser wanted; price £800.

5.—£900.—LONDON, W.—Prescribing, Dispensing, and General Retail, situate in good middle-class locality; very busy neighbourhood; good house and garden; on lease; very moderate rental; price about £650.

6.—£1,000.—LONDON SUBURB, E.—Very well fitted good-class Pharmacy; Retail and Prescribing business of the most profitable character; returns £1,000; convenient house and good stock; price about £900.

7.—£500.—LONDON, S.E.—Very old-established business; vendor retiring; present returns from good-class business £500 yearly; very handsome shop and exceptionally good stock; good house; price required £500; less than the value of stock and fixtures.

8.—£750.—SOUTH COAST.—Watering-place.—First-class Dispensing and Retail; very attractive shop and pretty locality; Business returns £750 to £775 yearly; can be largely extended; capital house; easily let if wished; purchase money £700, or valuation if wished.

9.—£575.—WATERING-PLACE, WEST.—Good-class Business; Dispensing and Retail; Returns £575 yearly; pretty locality and good house; price moderate; valuation if wished; about £400.

10.—£1,600.—NEAR LONDON (within 20 miles).—Store Business for disposal; returns last year over £1,600 under manager; principal can do much more; stock and fixtures at valuation; about £600.

11.—£1,800.—CORNWALL.—Mixed Business; Dispensing and Retail, with wine trade; returns £1,800; can be expanded under proper management; vendor relinquishing for health sake; valuation only required.

12.—£1,400.—FASHIONABLE TOWN (Seaside).—First-class Business, splendidly situate facing the sea, capital position; returns £1,400; business premises most convenient; good house; price about £1,400.

13.—£500.—KENT.—Rural district; Retail and Prescribing Business; returns nearly £500 yearly; very good profits; well-fitted shop and good stock; good house and large garden, well stocked; value of stock and fixtures only required.

14.—£1,500.—EASTERN COUNTY.—Central market town; good-class Business; returns £1,500 yearly, good profits; commodious shop and good stock; roomy house, every convenience; price about £1,200, or valuation at option of purchaser.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country. Particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London Agent.

NOTICE.—Messrs. ORRIDGE & CO. have a large number of Businesses for Sale, suitable for Gentlemen with Small Capital. Full particulars on application.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

F. J. BRETT, VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.
NO CHARGE TO BUYERS.

STOCKTAKING UNNECESSARY.—Stocktaking is always dreaded by Chemists, and with a competent Valuer is not necessary.

F. J. BRETT is prepared to estimate or to value entire stocks as they stand with little or no inconvenience to ordinary business, and has repeatedly done so with entire satisfaction to those adopting this mode.

STOCKS AND FIXTURES BOUGHT FOR CASH.

LONDON, W.—Returns £1,100; price £1,000.

LONDON, S.E.—Returns £430; price £325.

YORKS.—Returns £700; valuation £500.

LANC.—Returns £400; price £260.

EASTERN COUNTIES.—Light Retail; returns £870; price £750.

MESSRS. BERDOE & CO.

CHEMISTS' TRANSFER AGENTS & VALUERS,

30 JEWRY STREET, ALDGATE, E.C.

Established 1870.

NO CHARGE TO PURCHASERS.

1.—**SURREY.**—A good-class Light Retail, Dispensing, and Prescribing Business; returning over £800; net profit over £300; good house; low rent; well fitted and stocked shop; price £650.

2.—**KENT.**—Totally unopposed Light Retail, Dispensing, and Prescribing Business; returns £500; net profit £200; rent and taxes £25; good house and garden; price £450; personally inspected.

3.—**MANCHESTER (Suburb).**—Retail and Prescribing Business; returns £500 yearly; rent £36 on lease; good house; price £200, simply value of stock and fixtures; worth attention.

4.—**LINCOLNSHIRE.**—Market town; Retail, Dispensing, and Prescribing Business; returns £1,100; selling through ill-health; good house; large shop; price £750 or valuation.

5.—**LINCOLNSHIRE (Coast).**—Retail, Dispensing, and Prescribing Business; returns £600 under feeble management; capable of doing £1,000; good house in main road; well-fitted shop; price £420.

6.—**DEVONSHIRE.**—Light Retail, Dispensing, and Prescribing Business; returns nearly £450; much neglected; low rent; good house; well-fitted shop; good stock; price £300 or offer.

7.—**YORKSHIRE.**—Partner wanted in a ready-money Retail, Dispensing, and Prescribing Business, returning £2,000; young man with £300 to £400 would find this exceptional opportunity.

8.—**LONDON, W.**—Good-class Retail and Dispensing Business, returning £1,100, increasing yearly; splendid position in main road; good house and premises; price £850, or valuation.

9.—**LONDON, S.E.**—Crystal Palace District; Retail and Dispensing Business; returns £600; elegantly fitted shop, well stocked; good house and garden; price £550; worth special attention.

10.—**LONDON, N.**—Busy neighbourhood; Retail and Prescribing Business; returns £650; half profit; low rent; shop well fitted and stocked; price £300; £100 could remain.

11.—**LONDON, S.W.**—Splendid position in main road; neglected Retail; handsomely fitted and well-stocked; good house; returns £7 weekly. Price £250, or valuation; make good branch.

VALUATIONS personally conducted in any part of the United Kingdom. Full Stock Lists are taken by us, and no deputies employed. Twenty-two years' practical experience. Terms on application.

Messrs. Berdoe & Co., 30 Jewry Street, Aldgate, E.C.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

LIGHT Retail and Dispensing Business, in Country town in Kent, for disposal, owing to illness of proprietor, for valuation of stock and fixtures; low rent, nearly covered by agency. Apply, Mauby, Teutenden.

CASH Business for sale; good profits; excellent scope for good Prescriber; Dentistry would greatly increase business; splendid opportunity for beginner; small rent. Full particulars of Z., e/o "Chemist," South Ashford.

£200 will purchase a neat little Pharmacy doing £9 per week, at good profits, and capable of much improvement; beautiful locality; easy hours, low rent, &c. "Hilda," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£50, everything; strict valuation; New Drugs, &c.; opposite Price's and close to Orlando Jones's, and other large industries; no practical opposition; reason for leaving so soon would be given. "Glycerinum," 165A York Road, Battersea, London.

CROCKER & CO.

SOLE PROPRIETORS—

MR. WILLIAM JUDD and MR. ALFRED MANNERS,
Trade Valuers, Transfer Agents, and Accountants,
15 WALBROOK, E.C.

Having numerous inquiries for good-class Country Businesses, they invite communications from intending vendors.

NO CHARGE IS MADE UNLESS A SALE IS EFFECTED.

LONDON, N.—Family and Dispensing, with valuable Proprietaries; good house; returns £700; price £650; specially recommended.

WILTSHIRE.—Retail and Dispensing Business, in the principal position of an important town; returns £900; price £650; rent £60.

LONDON, N.—Valuable Retail and Dispensing Business, with nice residence, showing a net profit of £400; price £950.

MIDLANDS.—Dispensing and General Country trade; established many years; returns over £500; price, valuation of stock and fixtures.

LONDON (Suburb).—Retail and Dispensing Business, returning under manager over £300 a year, with good profit; price £250; specially recommended.

NO CHARGE TO PURCHASERS.

THOMAS TOMLINSON & SON, Chemists' Valuers, of New Cannon Street, Manchester, have Businesses for disposal in Padilham, £550, profits £280; Bradford, £420, profits £300; Ripon, £650, profits £250; Owston Ferry, £200, profits £100; Workington, £250, profits £200; Middleton, £300, profits £220; Liverpool, £200, profits £200; St. Helen's, £200, profits £133; Manchester suburb, £150, profits £120; Derby, £200, profits £120; Bolton, £120, profits £100; Sheffield, £450, profits £250; Bolton, £380, profits £125; Birkdale, £280, profits £200; Manchester (stores), £300, profits £300; Oswaldtwistle, £45, profits £100; Oldham, £280, good profits, and old-established; Hollinwood, about £150; Stockport, £120, profits £100, and several others private. No charge to ingoers. Say what you want, and we have little doubt but we can supply you.

BUSINESSES FOR DISPOSAL—Cont.

W.—A neatly-fitted and well-stocked Pharmacy; good house; corner position; private entrance; rent £70, half let off; returns £400, under manager; satisfactory reasons for disposal. For particulars, address Mr. R. Hill, Accountant, 49 Porten Road, Kensington, W.

FOR immediate disposal in a rising suburb of London, a well-fitted Chemist's and Druggist's shop, with good working stock; a first-rate opportunity for a pushing man; stock and fixtures £70. Apply, D. H., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A SMALL high-class Retail and Dispensing Business in fashionable suburb; large modern, handsomely-fitted shop; good house, long lease; price £180 cash, or valuation; owner taking larger business. Myrtle Grove, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£200.—Good-class Retail, Prescribing, and Agricultural Business, with Seed trade attached, in market town, best position; well fitted; returns about £400, can be increased; rent £40; satisfactory reasons for disposal. "Opium," e/o Evans, Sons & Co., Liverpool.

£100.—Druggist's; first-class position, main road, good trade; could be greatly improved under practical man; stock just valued at £70; good fixtures; must be sold; as it is now under female management. Address, 130/26, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£300.—**S.E.**—Light Retail and Prescribing Business, in a main thoroughfare of a good-class suburb; present returns nearly £9 weekly, and net profits nearly £4 weekly; expenses low; good house, with a nice garden; strictest investigation allowed. P., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LONDON Suburb.—Small but increasing Business; pleasant and improving locality; established 10 years; imposing shop, well stocked; present returns £300; good reasons for selling to immediate buyer at a sacrifice; offers invited. "Iris," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SURREY.—In good-class residential suburb; a Light Retail and Dispensing Business; returns £340 last year, and increasing; shop handsomely fitted, large house, 10 rooms, with private entrance; satisfactory reasons for selling. Apply, "Essentia," e/o Messrs. Davy, Yates & Rontledge, 64 Park Street, Southwark, London.

RAMSGATE.—Good position; returns £400, capable of being trebled on account of extensive alterations in the town, now in course of completion; purchaser will get advantage of full season trade, which will be exceptionally good; Price £300 or offer. "Kent," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

S.E.—Old-established; pleasantly situated; no opposition within a mile circle; embracing an unlimited first-class residential population; good house; easy rent. This promising Business, capable of immediate and increasing expansion, can be secured at a price to pay for refitting, which the position undoubtedly would justify, or reasonable amount down and balance out of profits. 124/37, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SITUATIONS OPEN—Cont.

AT once.—Messrs. Bonilly & Co., 85 Bishop's Road, Bayswater, require an Assistant; rooms found.

WANTED, a Pupil for the Veterinary and Pharmaceutical profession. B. Eggleton, Queen Street, Maidstone.

GERMAN HOSPITAL, Dulston.—Wanted, immediately, a Locum-Tenens, for Dispensary work, for an indefinite time. Apply, by letter, with testimonials as to qualification and character, also state terms, H. Gillich, Honorary Secretary.

MANAGER wanted, for Branch in Scotland; brisk Cash trade; out-doors; moderate hours, and good encouragement to an energetic man. State age, salary, details of experience, and when disengaged, to Cox, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, an indoor Assistant, thoroughly competent to Prescribe, Dispense, and Extract Teeth; those only who can furnish highest references as to ability, integrity, and sobriety need apply; good salary and commission. Apply, "Probum non Penit," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

IMMEDIATELY, a qualified Assistant, aged about 23; accustomed to very good-class business; must be reliable Dispenser; commencing salary £65 (indoor). Apply, stating full particulars, height, &c., enclosing photo (to be returned), to Mr. R. Thomas, 38 Linnet Lane, Sefton Park, Liverpool.

WANTED, an Assistant, about 22 years of age; one who has been accustomed to a good-class Retail and Dispensing business; to save time, a personal interview preferred; letters not answered within 2 days declined. R. Humphreys, 12A Upper Belsize Terrace, N.W., near the Swiss Cottage Railway Station.

WANTED, a competent Assistant of good address, not under 24, qualified, and desiring a permanency preferred; must be accustomed to first-class Retail and Dispensing, obliging, and have good references. Apply, stating full particulars, and enclose photo, to D. T. Evans, The Parade, Margate.

IMMEDIATELY; a qualified Assistant, aged 25 to 30 (indoor), to manage a Branch; short hours; accustomed to Prescribing, also to Extract Teeth, &c.; character must bear strictest investigation. Apply, stating age, height, references, salary, with photo (to be returned), to Chas. W. Jones, Chemist, Merthyr Tydfil.

MANAGER wanted, for small London business, or the business would be transferred immediately on security; must be qualified; abstainer and Extractor preferred. State age, if unmarried or married, and family, when disengaged, to "Oxide No. 324," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

JUNIOR wanted, who has just completed his apprenticeship; accustomed to the general routine of a Mixed Country business; no oils, colours, or heavy work; comfortable home; must be an abstainer; board, lodging, and £20 per annum. Apply, enclosing photo, to J. N. C. R., c/o Smith & Sons, Wholesale Druggists, Norwich.

QUALIFIED Assistant, for good General and Family trade (indoor); abstainer preferred; if convenient enclose carte (to be returned); an active and thoroughly trustworthy young man would have a comfortable home. Apply, stating age, height, experience, salary required, and references, to James Osborne, Medical Pharmacy, Ashbourne.

CHARING CROSS HOSPITAL, Strand, W.C.—The post of Assistant Dispenser is vacant; salary £90 per annum, with luncheon; candidates, who must not be under 25 or over 35 years of age, and must possess the Minor qualification of the Pharmaceutical Society, are invited to send in their applications, with copies of testimonials, addressed to the Chairman of the Medical Committee, on or before the 26th inst.

ARTHUR E. READE, Secretary.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

JUNIOR (20½); 5 years' experience; good references. W. L., Mr. Thos. Bell, Ambleside.

JUNIOR (19); 4 years' varied experience. Apply, J. G. Padwick, Chemist, Redhill.

JUNIOR (21); 6½ years' experience; good references. "Alpha," Ridge Hill, Barnet, Herts.

ASSISTANT; aged 25; qualified; town or country. 26 Bramerton Street, Chelsea, S.W.

ASSISTANT (23); tall; experienced; unqualified. Gilbert, Marke Hill, Saffron Walden.

DENTIST.—Situation wanted as Improver. M. B., Gordon Villas, Chester Road, Shrewsbury.

IMPROVER; aged 20; comfortable home greater object than salary. Turner, Grampians, Hastings.

ADVERTISER (22) seeks engagement; satisfactory references. T., 46 Tredegar Road, Bow, E.

ASSISTANT; qualified; 7½ years' experience; disengaged. A. P. S., Glanbeuno, Dysyn, Anglesea.

ASSISTANT; home or abroad; 13 years' experience. Jones, 20 Moriah Street, Rhymney.

BRANCH Manager (outdoors), Locum-Tenens; Minor; aged 25. Patrick, Silver Street, Kettering.

JUNIOR (21), in Dispensing business; London preferred. Clements, Aston Cantlow, Henley-in-Arden.

QUALIFIED Assistant; disengaged; City preferred. B. H., 26 Yerbury Road, Tufnell Park, N.

ASSISTANT (33); temporary or permanent; outdoors; experienced. "Extractor," 27 Drayton Park, N.

JUNIOR (22); seaside preferred; abstainer; tall; now disengaged. Rutter, Utkinton, Tarporley, Cheshire.

OUTDOOR Assistant; good knowledge of Photography; references. "Alpha," 3 Villa Road, Brixton, S.W.

LOCUM or temporary; qualified; good experience and references. Golland, Trinity House, Gainshorough.

TEMPORARY Manager or Senior; qualified; disengaged 21st. "Locum," 124 High Street, Tewkesbury.

MINOR Student seeks Part-time with Chemist; abstainer; unexceptionable references. Montrie, Eastleigh.

ASSISTANT (21); 5½ years' experience; disengaged; time for study desired. W. H. L., 18 Falcon Terrace, Whitby.

F. W., 43 Quarmby Road, Huddersfield; aged 23; disengaged; outdoors preferred; good references.

JUNIOR; 8 years' experience, Wholesale and Retail; disengaged April 7. Particulars from L. A., 34 Week Street, Maidstone.

ASSISTANT; tall; first-class experience; good references; 9 years at business. A. A. N., 7 Main Street, Clonmel, Ireland.

JUNIOR (21); 4½ years' good experience, and highest references; tall; abstainer; disengaged. Address, Eden, Chemist, Oxford.

PART-TIME Assistant, with opportunity to attend lectures or class; London preferred. "Atropia," 102 High Holborn, W.C.

THOROUGHLY experienced Chemist and Vet.; unqualified; temporary or otherwise. "Vet.," Bursledon, Southampton.

MANAGER (outdoors); permanency or Locum-Tenens; qualified and registered. D., 66 King's Cross Road, London, W.C.

AS Assistant or Part-time; 7 years' experience; height 5 ft. 11 in.; large town preferred. "Radix," 8 High Street, Mexboro.

MANAGER, Assistant, or Locum-Tenens; experienced and qualified; single; aged 37. B., 455 Coldharbour Lane, Brixton, S.W.

AS Senior, Manager, or temporary; first-class experience and references; outdoors; London preferred. E., 217 Milkwood Road, S.E.

AS Junior or Improver in good-class business; 3 years' experience; seaside town preferred. Rosser, Rock House, Abergavenny.

MANAGER, Assistant, or Dispenser; aged 37; long varied experience; Tooth-extractor. Stevenson, Towy Terrace, Llanidlo.

DISENGAGED.—Junior (20); in good London house; 5 years' first-class Dispensing experience. "Chemicus," 8 Coburg Place, Bayswater.

CLERK or Bookkeeper to Chemist; Wholesale or Retail; London; 5 years present situation; satisfactory references. S., 413 Oxford Street, W.

PHARMACEUTICAL Chemist, 18 years' experience, married, desires engagement. Dangerfield, 15 Brownlow Road, New Ferry, Cheshire.

OUTDOOR Assistant in good-class Retail and Dispensing business; married. Address, stating salary, hours, &c., R., 39 Eastgate Street, Gloucester.

QUALIFIED Assistant (23); disengaged; good references and experience; large town preferred. G. E., c/o Hodges, Chemist, Southampton.

BUSINESSES FOR DISPOSAL—Cont.

RICHMOND, Surrey.—Cash Retail and Prescribing, well fitted, thoroughly stocked; present hands 14 years; lease 18 years; rent £45 only; taking £450 at full prices; cash £400. Apply, 84 Sheen Road, Richmond, S.W.

£200.—Well-fitted, stocked Pharmacy, in a pleasant rising suburb, main thoroughfare; good house, side entrance; rent £32; option; lease 14 years 10s. per week let off easily; good profits; splendid opportunity for pushing young man with small capital. Apply, G., c/o Davy, Yates & Routledge, Park Street, Southwark, S.E.

CHEMISTS' Business. Prescribing and Retail; good old-established concern; profits, after deducting all expenses, £450 per annum; low rent; price £700, including fixtures, fittings, stock, and 14 years' lease; this is a thoroughly genuine concern, and is being sold under exceptional circumstances. Tranquar & Wiltshire, 96 Queen's Road, Brighton.

LONDON, S.W.—Cash Retail and Dispensing Business; returning £620; net profit £280; well stocked and fitted; good position on busy main thoroughfare; rent £60, long lease; good house, with side and back entrances, nice garden; fullest investigation courted; references exchanged. For price, &c., apply "Chemist," 15 Hamfrith Road, Stratford, E.

IMMEDIATE Sale.—A Retail and Prescribing Business, in growing Lancashire town; returns £8 or £8 10s. have been more, and could be improved with attention; rent £30, lease; good position in centre of town; reason disposal, leaving England; valuation of stock and fixtures. Apply, 127/32, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

RARE opening for young qualified man with little capital.—Surgeon's Retail for sale, as Chemist's shop; price to immediate purchaser £75, valuation; established 16 years; a Chemist is in great request in the neighbourhood; full prices, no opposition whatever; West-end. 131/3, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BRADFORD, Yorks.—Mixed Retail and good small Wholesale, a commanding corner shop, in a populous district, been carried on successfully for the last 25 years, latterly under management, must be sold to wind up a trust; a good opening for a pushing young man; price £400, or valuation. For further particulars, apply Appleyard, Chemist, 50 Park Lane, Denholme, near Bradford.

YORKSHIRE.—For immediate disposal, in densely populated and increasing neighbourhood of large town, a Light Retail and Prescribing Business; handsomely-fitted shop, good house attached, with private entrance; splendid opening for Dentistry; proprietors 2 Retail establishments. Address, Grosvenor, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FOR disposal, a genuine old-established Retail and Prescribing Business, in leading thoroughfare of a densely-populated neighbourhood, North London; returns about £400 yearly, can be increased; good opening for Dentistry; nice house, with private entrance and long garden; to an immediate purchaser a decided bargain. Apply, "Guido," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

EXCEPTIONAL Opportunity.—On account of family reasons, a first-class genuine Dispensing, Prescribing, and Light Retail and Fancy Chemist's Business for sale, in Lancashire; returns about £780; established 70 years; opposition, only one registered; rent only £30; capital house, with side entrance included; ingoing about £600. Apply, Thos. Tomlinson & Son, 9 New Cannon Street, Manchester.

CASH Retail, Prescribing, and Dispensing Business for immediate disposal, in rapidly improving neighbourhood; fullest investigation allowed; satisfactory reasons for leaving; double-fronted lofty shop; modern house; lease can be had, or, if desired, house may be purchased, being vendor's own property; average returns last 3 years over £800, profits above the average; price about £480. Newcombe, Chemist, Bealunster, Bristol.

BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

LONDON.—Wanted immediately, a first-class City Business in a good position. J. A. H., 120 Kensington Park Road, S.E.

WANTED, immediately, a good Dispensing and Retail Business; if of an Agricultural nature, not objected to; returns £600 to £800. Address, "Alpha," 10 Trevor Street, Wrexham.

WANTED, genuine Light Retail and Dispensing Business, upon easy terms, returning not less than £500. Full particulars, in confidence, "Fides," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, small Wholesale Drug or Sundries Business (or Partnership); must be established and capable of extension. Particulars to W. F. S., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, a genuine good-class Retail and Dispensing Business, with Mineral-water Manufactory attached; one capable of development; cash ready to invest. Full particulars, in confidence, to "Syphon," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, a good Retail and Dispensing Business, returning over £800 a year, with a good house attached; business must bear strictest investigation. "Dispenser," care of Edwards & Son, 157 Queen Victoria Street, E.C.

ADVERTISER is desirous of purchasing (for cash), a Light Retail and Dispensing Business, either in the suburbs of London or in a healthy part of the country; returns £800 to £1,200; particulars received in confidence. "Cortex," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SALES BY TENDER.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

TO be sold by Tender, the contents of a Chemist's shop, at 2 Fountain Street, Manchester, consisting of Drugs, a few Sundries, and Patents, less fixtures. May be viewed at any time, or particulars from "Secretary," to whom Tenders should be sent by Friday, 6 Urnston Park, Urnston.

Re JNO. GOODALL, CHEMIST AND DRUGGIST, TONTINE STREET, HANLEY.

TO be SOLD by PRIVATE TENDER, as a going concern, the Business of a Chemist and Druggist as above, including the Stock-in-Trade, Fixtures, Fittings, and Effects. Tenders must be forwarded on or before Monday, March 20, 1893. The highest or any tender will not necessarily be accepted. To view, and for further information, apply to Samuel Pointon, Trustee, Trinity Buildings, Hanley, Staffs.

TENDERS.

CONTRACT FOR DRUGS, &c.
ROYAL HOSPITAL FOR DISEASES OF THE CHEST,
CITY ROAD, E.C.

THE Drug Committee invite Tenders for the supply to this Hospital during the half-year from March 25th, 1893, to September 29th, 1893, of Drugs, &c. Sealed Tenders, addressed "Tender for Drugs, &c.," must be forwarded to the Secretary at the Hospital, not later than noon, on Monday, the 13th instant, from whom forms of tender, and all other information can be obtained. The Drug Committee does not undertake to accept the lowest or any other tender.

March 1st, 1893. By order, JOHN HARROLD, Secretary.

PARTNERSHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

PARTNER with £1,000 required; knowledge of the manufacturing of Perfumery and Fancy Soaps advantageous. Apply, by letter (strictest confidence), P. & S., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PARTNERSHIP.—Gentleman with £1,000 in Dispensing and General Business will take qualified Chemist with £150; business doing £2,000 yearly. Further particulars to "Drugs," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

APPRENTICESHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

A. ASHFIELD, Pharmaceutical Chemist, 161 King's Road, Reading, has a vacancy for a smart, well-educated youth as Apprentice.

CHEMISTS' Apprentice.—H. H. Parby, Chemist and Druggist, Swansea (near Albert Hall), has a vacancy for one; every facility offered, with comfortable home; terms moderate.

MR. G. E. NORRISH has a vacancy for a well-educated and gentlemanly youth as Apprentice, where he will be guided in his studies, and thoroughly instructed in the modern practice of the business; premium; indoors. 77 Atlantic Road, Brixton, S.W.

TO LET.

TO Chemists and Druggists.—To Let, excellent Shop in North Queen Street, Belfast; stock and fittings at valuation; rent moderate. Apply, Macfarlane, Queen's Buildings, Royal Avenue, Belfast.

RAMSEY, Isle of Man.—To Let, Shop, with Chemist's fittings, in the principal part of the principal street; occupied by a Chemist the past 6 years; no qualification necessary in the Isle of Man. Apply to R. Corkhill, Builder, Ramsey.

WANTED, furnished Room (London), where there is good opening for Dentist; main road. "Dental," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

A QUALIFIED Assistant; not under 24. Apply, Davies & John, Chemists, Bath.

WANTED, Assistant (qualified), for Dispensing and Counter trade. G. Wood, Barge Dock Side, Goole.

A JUNIOR Assistant for Dispensing and Light Retail business; one kept. Apply, R. Hiscock, Chemist, Coventry.

A N Assistant, accustomed to a good-class Dispensing business; about 22. Apply, Hardwick, Commercial Road, Bonneworth.

A SSISTANT required for Ceylon. Apply, by letter, enclosing photograph, to H., c/o Balss, Brothers & Co., 4 Jewry Street, E.C.

WANTED, early in April, good Junior; Minor; able to speak Welsh. Apply, stating salary, to Rees Thomas & Son, Merthyr Tydfil.

WANTED, a qualified Branch Manager; married man preferred. Apply, giving full particulars, to P. Kirby, Abington Street, Northampton.

WANTED, at once, an Assistant used to Country trade, and an Extractor preferred. State salary required, &c., to L. Parkinson, Atherstone.

JUNIOR Assistant required, at once; good opportunity for thoroughly learning the Drug trade. Starton & Sons, Pharmaceutical Chemists, Peterborough.

A N Assistant to manage Branch; indoors; unmarried; Minor; aged 25 to 30. Apply, with usual particulars, to Saver & Co., 104 High Street, Ramsgate.

BY April 6, qualified Assistant, accustomed to good-class Mixed business. Applications, with carte and all particulars, to Smith, Market Place, Stroud, Glos.

WANTED, a good active Assistant for the Retail Counter. Reply, with reference and salary required (outdoors), to James Stewart, Chemist, Cheltenham.

WANTED, a Junior, with a good knowledge of Dispensing; time allowed for study; 2 assistants kept. Apply, with references, to Lakeman, Chemist, Leytonstone.

WANTED, Dispenser and Bookkeeper for firm of Surgeons; rooms; married preferred. Apply, Spencer House, Highbury Corner, London, N., at 1 to 2, or 6 to 7.

A SSISTANT; Minor qualification; indoors; good Dispenser, &c. Apply, with full particulars, enclosing c.v., to W. Edds Everett, St. Botolph's Pharmacy, Colchester.

FROST & HARRISON, 3 Eltham Road, Blackheath, S.E., require a competent Junior. Apply, stating age, height, and salary required, with photo (to be returned), as above.

SOUTH Coast.—Junior Assistant wanted (outdoors); short hours; state age, height, and salary required. 128/15, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

JUNIOR wanted, at once, for medium-class business; indoors; must be active and industrious. Apply personally, or, if by letter, enclose carte, Banbury, 390 Walworth Road, S.E.

A JUNIOR Assistant. Apply, enclosing photo if possible, stating qualification, age, height, salary required, and references, to Harold Wyatt, 223 Stanley Road, Bootle, Liverpool.

A N experienced Assistant, competent to undertake management of Branch; must be accustomed to good-class business. Apply, giving full particulars, Lloyd, Chemist, Colwyn Bay.

WANTED, competent Assistant, not under 22, for good-class Mixed Retail and Dispensing. Give full particulars as to salary and references, and enclose photo, to Marson & Son, Stafford.

G. S. BALL, Pharmacist, Weston-super-Mare, requires an Assistant of good address, about the end of March. Apply, with photo if possible, stating age, height, experience, and reference.

WANTED, Assistant (indoors); must be accustomed to good-class Dispensing business. State full particulars, and enclose photo, to J. Phillips & Son, Pharmaceutical Chemists, Newport, Mon.

WANTED, young qualified Chemist, to manage small Retail and Prescribing business for widow; must be steady. Apply, enclosing photo and full particulars, 138 Queen's Road, Halifax, Yorks.

JUNIOR or Improver; one accustomed to country trade; hours easy; no Sunday duty. Send usual particulars as to age, height, salary, &c., and enclose carte, to A. Smart, Pharmaceutical Chemist, Steving, Essex.

WANTED, Assistant (18 or 19), with about 3 or 4 years' experience, March 25; Agricultural business; hours 8 to 8; weekly half-holiday; outdoors; please send usual particulars. Hurd Chemist, Uttoxeter, Staffs.

WANTED, end of March, a competent, gentlemanly Assistant, of energetic business habits (indoors), with knowledge of Dentistry. Apply, giving references and full particulars, to W. B. Biddle, Chemist, Reading.

WANTED, unqualified Assistant, with good experience, as Office Clerk; must be good writer and quick at figures. Apply, stating age and all other particulars, to A., c/o Wright, Layman & Umney, 50 Southwark Street, S.E.

FOR the East (China).—Shortly, one or two thoroughly competent Assistants; qualification not so much an object as ability and first-class business experience. Address, A. S. Watson & Co. (Limited), 8 Fenchurch Buildings, E.C.

TRAVELLERS.—Messrs. Fletcher, Fletcher & Stevenson would be glad to co-operate with another firm of repute in sharing the services of two or more first-class Representatives for the home trade. Address, 21 Mincing Lane, E.C.

WANTED, good Junior for Mixed business; indoors; must be able to Dispense; good references indispensable. Apply, giving age, height, salary, and references to last employers, J. Bonnett, Chemist, Albert Road, Widnes, Lancashire.

WANTED, immediately, a young man, chiefly for putting-up Stock; must be neat and energetic; only good workers, with reliable references, need apply; outdoors. State fullest particulars, Vause's First-class Drug Stores, 297 Edgware Road, W.

MINOR, aged 26 to 30, to manage good-class Branch (South Coast); must be good Dispenser, and of gentlemanly appearance; single; good references indispensable. Full particulars in first letter, to J. S., c/o Barron Harveys, Giltspur Street, E.C.

A JUNIOR Assistant (indoors); must be a good Salesman and a neat Dispenser. Apply, stating full particulars, with photo if possible (which will be returned), also age, height, previous experience, salary expected, &c. Meacham, Chemist, Ledbury.

A SSISTANT (indoors) for good Country Retail and Dispensing; good Counterman, and obliging. Apply, stating age, salary, experience, height, and enclosing carte (to be returned), to John Gilling, Pharmaceutical Chemist, Saffron Walden.

WANTED, a Gentleman, having a good connection amongst Agricultural Chemists in the South and West of England, to represent an old-established firm of Manufacturing Chemists. 234/22, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, about middle of March, a good Junior, about 20 years of age; must be well recommended; abstainer preferred. Apply, giving full particulars, salary, and photo, if convenient (to be returned), to J. H. Bowling, 44 Diamond Street, Pembroke Dock.

A SMART and obliging Junior or Assistant, accustomed to a Cash trade; good Prescriber and Extractor preferred. Please apply, stating full particulars and 2 last references, to The Economic Drug Company, Cash Chemists, 10 Caroline Street, Carlisle.

BRIGHTON.—Junior Assistant; thoroughly steady; accustomed to good-class Dispensing business; about 21 or 22; abstainer. Address, with usual particulars, age, height, salary, and reference, &c., and enclosing photo, to Mr. Vizer, 154 Marine Parade, Brighton.

IMMEDIATELY, Assistant (qualified); unexceptionable references; abstainer preferred; indoors; within 20 miles of London. Enclose carte (to be returned), stating salary, height, age, and experience, to J. P. Q., c/o Messrs. Barclay & Sons, 55 Farringdon Street, E.C.

JUNIOR Assistant; one with slight knowledge of Photography preferred; able to Dispense and Prescribe. Address, with references, age, salary required, enclosing photo if convenient, and all particulars, to Walter L. Stokes, 22 High Street, Brompton, Chatham.

REQUIRED, in the Pharmacie Yvon, 7 Rue de la Feuillade, Paris, a first-class Assistant, with thorough knowledge of English and French, and at least 2 years' experience; terms 150 francs a month and lodging; periodical increase of salary. Apply in French, with photo.

JUNIOR required, immediately (indoors), for Light Retail and Dispensing business; one able to Prescribe and Extract Teeth preferred. State age, height, salary, references, and enclose photo (which will be returned), to H. G. Sewell, Dispensing Chemist, Herne Bay, Kent.

WANTED, qualified Assistant, for seaport town on South Coast; trout rearing; hours very moderate; Sunday duty only nominal; good opportunities for promotion. Apply, stating age, height, experience, and salary required (outdoors), to Day's Southern Drug Co. (Limited), Southampton.

WANTED, qualified Assistant a Second, unmarried preferred (outdoors), for pleasant seaside town in the South of England; short hours and very little Sunday duty. Apply, stating full particulars of age, experience, &c., and salary required, to M., c/o Burgoyne & Co., 16 Coleman Street, E.C.

SITUATIONS WANTED—Cont.

JUNIOR (21); good-class Retail and Dispensing; disengaged. Jones, 16 West Square, S.E.

LOCUM-TENENS (36); qualified; abstainer; disengaged. "Minor," 8 Castle Street East, W.

ASSISTANT (24); tall; outdoors; 9 years' experience. "Radix," 112 Devonshire Road, Holloway.

AS Assistant or Manager by qualified Chemist; aged 40. S. Hassall, 143 Charles Street, Hanley, Staffs.

DISPENSER to Chemist or Surgeon. P., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

DISPENSER or Assistant (20); 6 years' experience; excellent references; disengaged. Muir, Trowbridge.

MANAGER or Locum-tenens; qualified; aged 41; 5 ft. 11 in.; all-round experience. "Chemist," 92A Belle Vue, Shrewsbury.

JUNIOR (20); 4 years' experience; good Dispenser and Counterman; good references. D. J., 1 Lonvaine Road, Clapham Junction.

DISPENSER, Manager, or Assistant; good Retail, Branch, and Hospital experience; outdoors. H. A., 5 St. John's Road, Reading.

MANAGER or Dispenser; outdoors; married; Extractor, Prescriber; varied experience; qualified. "Minor," 4 Medwin Street, Ferndale Road, Brixton.

JUNIOR (21); 6 years' experience; good Counterman and Dispenser; highest references; outdoors preferred. E. G., 43 Lynette Avenue, Clapham, S.W.

SITUATION wanted as Assistant, in a good Dispensing business; aged 20; 4 years' experience; good references. Geo. Langworthy, jun., Kingsbridge, South Devon.

MANAGER, Assistant, or Dispenser (30); married; London or district preferred; experienced; unqualified; Extractor. "Chemist," 49 Snsan's Road, Eastbourne.

BY registered Chemist of good business experience, management of Drug Stores. Address: "Qualified," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

OUTDOORS; disengaged; Assistant, Branch, Surgeon's Retail; town, suburbs; Hall qualification; Extractor; aged 40. Bellamy, 10 Woolville Grove, Milnway Road, N.

AS Manager or otherwise; qualified; over 20 years' good and varied experience; successful as Branch Manager. Jones, Springfield House, Rhiwderin, Newport, Mon.

MANAGER, view to succession, where there is good opening for Dentistry; good-class business. "Forceps," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, by April 4, evening employment, in London (as Dispenser preferred), with Chemist or Surgeon; good experience. J. H. C., "Assistant," 70 Warwick Road, Kensington, S.W.

JUNIOR, unqualified, 4 years' London and country experience, aged 19, tall, seeks situation (in this county preferred); disengaged at Easter. F. Butler, Repeham, Norfolk.

MANAGER or Senior (26); qualified; experienced Prescriber and Extractor; excellent testimonials; disengaged. 129/22, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MINOR and Hall, abstainer, aged 24, 5 ft. 5 in., experienced in first-class Dispensing, requires situation as Locum (indoors), or Manager of Branch (outdoors). "Salophen," 12 Young Street, Doncaster.

JUNIOR Assistant, unqualified, disengaged, seeks re-engagement; good Dispenser; City experience; steady; Surgeon or Chemist. Apply, 119/24, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MANAGER, aged 40, married (1 daughter), qualified 1872, requires a post as above; fully competent to Prescribe, Extract Teeth, &c.; highest references. H. Johnson, 67 St. John Street Road, London, E.C.

WANTED, situation as Assistant or Manager, with view to succession upon easy terms; outdoors; height 5 ft. 9 in.; over 10 years' experience; good references. "Fides," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AS Manager, Traveller, or position of trust, Wholesale or Retail; Major and Apothecaries' Hall qualifications; well up in modern Pharmacy, Analytical Chemistry, and Photography; aged 36; married. "Chemist," 18 Brighton Road, The Avenue, Southampton.

TO Wholesale Drug, Druggists' Sundries, or Perfumery houses.—Advertiser, aged 34, of good address, used to the road, and with first-class personal and business references, seeks a permanency as Traveller. "Energy," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SOUTH Africa.—Wanted, by a gentleman (28), at present managing Drug stores, commission or situation as Assistant or Traveller in South Africa; long experience in salesmanship, with some experience of the road; highest references. "Manager," Saul & Co., Drug Store, Crewe.

A GENTLEMAN, with excellent connection amongst the Chemists and Druggists throughout Canada, wishes to undertake the introduction and control for Canada of the sale of the products of one or more manufacturers of specialties in the Druggist Sundry or Proprietary line; satisfactory references. Address, "Canada," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading which can be obtained on application.

BARCLAY & SONS (LIM.).—For sale, 100 £5 6-per-cent. Preference Shares, £3 paid, at £2 10s., and 120 £5 Ordinary Shares, £3 paid, at £2, to wind up an estate; would be divided in equal proportions. Apply, "Executor," c/o Black & Sons, Perry Vale, Forest Hill.

FAIR Price given for full account of Modified Examination from men who passed or failed since 1890. Apply, stating price to 127/8, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO OWNERS OF PROPRIETARY ARTICLE

A LIMITED Company, with London offices and the necessary experience and equipment for advertising, making, and placing on the market a Stamped or Proprietary Article, can arrange to introduce a new article at an inclusive charge or risk. Apply by letter in first instance to "Company," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PRELIMINARY AND MINOR.

STUDENTS! Write to-day for a "Guide to Examination," gratis and post free, giving the best advice and how to prepare. Knotty Points in Latin Grammar, 1s. 6d.; Caesar Simplified, 1s.; Metric System Simplified, 1s.; How to Write an Essay, 3d.; Equations Simplified, 1s.; Student's Herbarium, 100 specimens, 7s. 6d.; post free. Mr. J. Tully (Hills Prize-man), Chemist, Hastings.

BOOKS FOR THE CHEMIST'S LIBRARY.

- "**THE ART OF DISPENSING.**" Price 3s. 6d. By post, 3s. 10d.
 "HANDY BOOK OF MEDICINE-STAMP DUTY." By E. N. ALPE, of the Solicitor's Department, Somerset House. Price 2s. 6d. By post, 2s. 9d.
 "MANUAL OF PHARMACEUTICAL TESTING." By B. S. PROCTOR, F.I.C. Price 2s. 6d. By post, 2s. 9d.
 "VETERINARY COUNTER PRACTICE." Price 3s. 6d. Post Free, 3s. 9d.

Published at the Offices of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.; and from all Wholesale Houses.

Pharmacopœia, he said it directs that an aqueous solution of tartaric acid shall not be affected by sulphuretted hydrogen. In the case of citric acid the word "darkened" is substituted for "affected." As the Pharmacopœia appendix directs the preparation of a solution of tartaric acid by dissolving 1 oz. of acid in 10 oz. of liquid, we may probably assume that the test is satisfied when a solution of this strength remains unaffected by hydrogen sulphide. The Pharmacopœia is, however, silent as to the point whether hydrogen-sulphide gas or its solution is to be employed, and that, as was pointed out, is an important omission. Moreover, experience shows that lead is best detected in alkaline solution. Mr. Warington proposed that the limit of lead should be 5 per million when treated by the following method, or in similar proportions when only a qualitative test is wanted:—

Forty grammes of the tartaric or citric acid are dissolved in a little water, treated with excess of pure ammonia, and brought to 120 c.c. Fifty cubic centimetres of this solution, or a smaller quantity diluted to 50 c.c., are treated with 1 drop of ammonium sulphide in a Nesslerising cylinder, and the clear-brown colour matched by an exactly similar mixture of pure tartaric or citric acid with ammonia and a measured quantity of the lead solution.

Being asked to resume the discussion, Mr. WARINGTON stated that since last meeting he had examined some popular effervescing powders—he could not mention the names—and had found the following percentages of lead present:—

Soluble in Water		Total Combined Lead
0.0040	..	0.0042
0.0004	..	0.0012
0.0002	..	0.0032

He had also a communication from Professor Attfield, the reporter on the British Pharmacopœia, who said:—

Statements in the British Pharmacopœia respecting citric and tartaric acids that an aqueous solution is not altered by sulphuretted hydrogen mean, obviously, that the compilers do not recognise the presence of lead, tin, or copper in either, and there is no reservation as to the strength of the aqueous solution, or as to the reagent being dissolved or in bubbles notwithstanding any shred of foundation in the book for any such forced interpretation. . . . But why attempt to set numerical bounds to bagatelles? Where are the limits to be drawn? Why even at 1 per million?

Mr. Warington thought that Professor Attfield did not clearly understand that the limit of lead detectable in citric acid could not be perceived in tartaric acid, yet the Pharmacopœia gave substantially the same test for both. (Applause.)

Mr. BEVAN said that since last meeting he had repeated Mr. Warington's experiments. He agreed with him that the results of the colorimetric test were fallacious, and was afraid that analysts had relied upon them in the past. His experiments had been made with lemonade. Practically, the presence of acid increased the sensitiveness of the lead-test four times, and even sugar increased it twofold as compared with water.

Dr. ALDER WRIGHT said that an explanation of the increased delicacy of the test under these conditions was to be found in closer molecular aggregation.

Mr. H. R. SMITH (Teschemacher & Smith) said he preferred to incinerate the acid before determining the lead. Speaking of the British Pharmacopœia "rough standard" he said it was a curious point that many chemists took this to mean that any quantity of soluble lead exceeding 0.0001 per cent. in tartaric acid was to be condemned. He also pointed out that if the ammonium-sulphide method is to be used metallic lead would also be shown, and thought that if manufacturers could produce an acid containing not more than 0.0005 per cent. total lead it was as much as they could expect—a better result, indeed, than he could have thought possible.

Mr. E. J. MILLARD asked what was the cost of the lead-free acid? Hitherto such acid had been offered at quite a prohibitive price; but if it could be got at 10 to 20 per cent. above the ordinary acid he felt that wholesale druggists would prefer to handle it. He also gathered from Professor Attfield's letter that the British Pharmacopœia would be revised in accordance with Mr. Warington's suggestions. Mr. Millard also called the latter's attention to Siebold's work on arsenic containing glycerine.

Mr. JOHN C. UMNEY took it from Professor Attfield's letter that there would be some difficulty as to fixing a

standard. However that might be, he thought it was very necessary that a standard should be fixed. The London Chamber of Commerce had fixed different standards for citric and tartaric acids, but they might as well be alike.

Mr. THOMAS TYRER, after referring to the great inconvenience and hardship which had arisen through there being so many ways for detecting and estimating lead in these acids, said that analysts should now agree upon the procedure which they should adopt, and abhor the roughness of the British Pharmacopœia. If ever there was a thing in which there was deplorable looseness it was in the British Pharmacopœia. (Laughter.) Mr. Hodgkin had said at the Edinburgh meeting of the Pharmaceutical Conference that the best way to get good chemicals was to pay the price for them; but he (Mr. Tyrer) thought there was a better way—viz., to eliminate bad chemicals by adopting rigid tests for them. That should be done in the case of these acids, for at present the standards are too low. He had repeated Mr. Warington's experiments, and corroborated them. He had also seen notes prepared by Mr. Hehner, which would have taken the form of a speech that night had Mr. Hehner not been called to the provinces, and these notes showed admirably how far analysts had been on the wrong track in this matter, for he found that copper and tin were much in excess of lead in various food-substances, although they, being precipitable by sulphuretted hydrogen, were reckoned as lead. Turning to Dr. W. R. Smith's report in the Woolwich case he (Mr. Tyrer) questioned his authority for saying that 0.0026 per cent. of lead in tartaric acid is a poisonous quantity.

Mr. WARINGTON: "Poisonous quantity" was the expression used in THE CHEMIST AND DRUGGIST, and I have no other authority than THE CHEMIST AND DRUGGIST.*

Mr. TYRER, continuing, said if the report was inaccurate it should be corrected; but in that connection he might say that Dr. Thomas Stevenson, a toxicologist whose ability none would dispute, was prepared to say that lead in such quantities was innocuous. Nevertheless, he thought the public had every right to be protected, and he hoped that, as the result of Mr. Warington's most careful research, a definite quantity of lead would be fixed on.

Mr. WARINGTON, replying, briefly dealt with the remarks of Mr. Bevan and Dr. Wright. It was impossible to incinerate tartaric or citric acid as Mr. Smith suggested. A question was asked as to what degree of purity they could get the acids. To that he replied, Absolutely lead free, for there was this remarkable fact to be considered—that if the acids contained only traces of lead non-precipitable by sulphuretted hydrogen, if they added more lead before the gas, then they got the whole lot down. Five per million was not so low as the Pharmacopœia standard for citric acid. The increased cost of freeing the acids from lead was so very small that the manufacturers had not increased the prices. Speaking of Dr. Smith's statement at Woolwich that lead was cumulative, and that was the reason why the trace of it present in tartaric acid was dangerous, Mr. Warington supposed that if in our intake the amount of lead did not exceed the output—(laughter)—always reserving, of course, that we did not take these effervescing powders several times a day (as he believed, some people did)—(laughter)—it was difficult to see where there would be accumulation.

This, with the exception of a paper taken as read, concluded the proceedings.

LIVERPOOL SECTION.

At last week's meeting Dr. G. SCHACK-SOMMER communicated the results of sugar-beetroot growing experiments made in England, Scotland, and Ireland during 1892. This was the fourth consecutive year during which the trials had been made, and the feasibility of successfully-growing sugar-beetroot in this country was demonstrated.

Dr. F. HURTER followed with a paper on "Coke Towers and Similar Apparatus," which was an able exposition of the utility of coke towers for the absorption of gas by liquids. Dr. Hurter also described in detail the best conditions for working the tower.

Dr. T. L. BAILEY and Mr. P. H. JONES contributed a

*The report in our issue of July 23, 1892, referred to, is from shorthand notes by one of our staff, and the context clearly shows the accuracy of the report.—ED. C. & D.

paper on "The Cause of the Red Coloration of Calcium-chlorate Liquor." They believe that manganese is the trouble, not calcium ferrate.

MANCHESTER SECTION.

The first paper at last week's meeting was by Mr. GEORGE E. DAVIS, on "Some Experiences in the Manufacture of Carbolic Acid." This was mainly a description of West-Knights and Gall's method, by the use of which there are no waste liquors to run into the sewers or watercourses, and lime at 12s. a ton does duty for caustic soda at 12l. a ton.

Dr. BAILEY, afterwards speaking on town smoke, gave some interesting information regarding the amount of sunlight falling in Manchester, and the amount of sulphurous acid on foggy days compared with a normal atmosphere. The paper is to be discussed at the next meeting.

Mr. J. CARTER BELL read a paper upon the preparation of alcohol for laboratory use.

CHEMISTS' ASSISTANTS' ASSOCIATION.

At a meeting of the Association on Thursday, March 2, at 103 Great Russell Street, a paper was read on

ESSENTIAL OILS.

By H. A. D. Jowett.

Under the botany of the subject it was pointed out that essential oils occur in certain natural orders only, especially the *Rutaceæ*, *Umbelliferae*, *Compositæ*, *Coniferae*, *Lauraceæ*, and *Labiatae*. They occur in all parts of the plant. The oil is usually contained in special receptacles, arising either by the differentiation of the fundamental tissue and known as protogenetic, or those appearing in already differentiated tissue, known as hysterogenetic. The former are most common, and occur as vessels. The information regarding the method of formation of the oil is scanty, but Mesnard has recently made some interesting observations in this direction. According to his researches the oil is produced from tannoid substances (formed from the chlorophyll) in the absence of light and oxygen. Thus in the sepals the oil is found in the cells in the upper surface protected from the light and air. In some cases the oil is produced by the action of enzymes—*e.g.*, valerian, bitter almonds, and possibly salicin. There seems little physiological function for the oils in the plant-economy. They appear not to be used as food, but to rank with resins and alkaloids, and take no place in the metabolism of the plant, but are nothing more or less than excreta.

Passing on to the chemistry of the oils, the author treated the subject in a quite general way, as it was too large for particular oils to be discussed at any length; but so far as he went Mr. Jowett gave a lucid description of the chief bodies which are found in essential oils, showing their constitution as far as has been determined, and the relation of the bodies to one another.

In regard to the commercial side, he said the source of essential oils is twofold—those distilled from flowers or wood in Great Britain, such as oils of lavender, peppermint, and sandal wood, and those prepared abroad, usually at the habitat of the plant which yields the oil. Those made in Great Britain should be easily obtained in a state of purity, so long as care be taken to patronise firms of recognised standing—(apause)—and a fair price be paid for them. Those of foreign origin are very often largely sophisticated. In the author's opinion, no satisfactory test can be devised for an oil, unless we have a knowledge of its constituents and can obtain it in a state of unimpeachable purity. Methods can be devised which have not for their object the mere detection of specific impurities, but the determination of the purity of the oil under examination. Fractional distillation is largely employed in this direction, but it is very tedious and of little real use unless the various constituents have boiling-points separated from each other by at least 5° C. Specific gravity is a much more precise factor, but here, again, it is easy to manipulate an adulterated oil so as to have a specific gravity equal to that of the pure sample. Specific rotary power is quite useless, because a judicious admixture of bodies of known rotary power will give a result which indicates a pure sample. Although colour-reactions are largely used in the B.P. they can only be considered of value in detecting a definite impurity and taken generally are of little use. Re-

fractive indices are to a great extent valueless for the same reason as is rotary power. The iodine absorption is a step in the right direction. It appears to depend on a combination of the terpene with iodine. It is not, however, free from objections. The saponification number, or amount of potash used to saponify the esters, is perhaps the best test that can be applied to the oils. For a really satisfactory examination of an essential oil we require proof of the identity of the oil and of the absence of foreign substances. To be able to obtain these it is necessary for the observer to have standard oils whose purity he can rely upon. These can only be obtained by the observer actually preparing them for himself. And, furthermore, his botanical knowledge must enable him to be certain he has obtained the precise plant which yields the oil he wishes to obtain. A thorough recognition of all the important constituents and their estimation is then necessary. But at present we rely on very technical methods for analysis of these oils. Officially we have practically nothing more than colour-tests—no determination of actual purity is asked for. The patient labours of investigators will perhaps help to remedy this state of affairs, for perhaps no bodies are so liable to adulteration as essential oils. Mr. Jowett then referred to terpeneless oils, and stated that they are chiefly useful as perfumes or flavouring-agents.

DISCUSSION.

The PRESIDENT (Mr. F. A. Rogers) thought Mr. Jowett's paper would prove extremely valuable to pharmacists. It would be of great interest to know why these oils, when kept for any length of time, lost their aroma so much. He believed that the oxidation of sulphur compounds, in those oils in which they occurred, was the reason of this to a great extent. It was very peculiar that lemon oil should so easily change into turpentine, whilst the reverse never happened.

Mr. MACEWAN said the paper had been of great interest, but he considered that Mr. Jowett had forgotten, in the last part of his paper, that he was a pharmacist. There were two points of view from which the question of purity and analysis of these oils might be regarded—the purely scientific, and the everyday side—and until there has been a great deal more scientific investigation on these oils we must be content to judge them from a more or less empirical point of view, based on commercial experience. Granting that the terpeneless oils might not be altogether what they claimed to be, they were certainly far more aromatic than the original oils, and were admirably adapted for the purposes for which they were used. He did not agree with Mr. Jowett as to the utility of the information given by the specific rotatory power—for example, there were two classes of eucalyptus oils, well marked by their opposite activity, and one could easily tell whether or not he had the kind sought for. In the same way the limits of their specific gravity were well marked—one being about .900, and the other .885. He agreed cordially with Mr. Jowett in regard to the uselessness of colour-tests, especially as conception of colour was quite an idiosyncrasy, and slight variation of temperature or mass gave very different results. He did not put much faith in the value of the iodine-absorption method. He thought that there should be more tests, especially those indicative of the purity of the oil itself, rather than those aimed at detecting a specific impurity, in the Pharmacopœia. He hoped reliable information would be further supplied by such workers as Mr. Jowett had proved himself. He could quite sympathise with Mr. Jowett on the question of fractional distillation. While that gave a fair idea as to the empirical composition of an oil, under ordinary conditions they could not get those sharp separations which were necessary if the composition of the oil was aimed at. And, although they did, they could not be altogether sure that the heat applied in distillation did not break up the aromatic or odorous bodies existing in the oil. Hence, although distillation factors might be useful for guidance, workers should not dogmatise with them.

Mr. GANE thought that in the *Rutaceæ* the oil was probably used for food in the plant-economy. There was in this case no tapetal layer to prevent dispersion of the oil into the surrounding tissues. It must be remembered that synthetic essential oils often exhibited injurious impurities—for example, benzaldehyde, which was usually prepared from

benzyl chloride. In this case there were several chlorinated compounds found in the artificial product.

Mr. ROBINS said his experience of terpeneless oils did not agree with Mr. Jowett's. He had always found them keep well, and possess very great flavour. A test he had used with great success for adulteration of oils with turpentine was the relative solubility of salicylic acid in the oils and in turpentine.

Mr. E. J. PARRY thought that Mr. Jowett was quite right in insisting on the necessity of very scientific tests for the purity of these oils. Whilst we had those everyday standards Mr. MacEwan had referred to, we should be playing into the hands of the oil-adulterators, who were ever ready to imitate an oil in all their general characters. He did not think the saponification-equivalent of much use in the case of the mixtures usually met with as a test. He thought that the iodine-absorption method of great value, so long as the original standards were worked out on samples of absolutely known purity, which, in many cases, they certainly could not have been, on account of the great variability in the results of workers of known standing.

Mr. JOWETT, in reply, said he had not relied only on his own experience as to the bad-keeping properties of terpeneless oils, but had also taken the opinion of several of his fellow-students. He pointed out that the impurities in synthetic oils were avoidable, and were of a similar character to those in salicylic acid. Of course, what Mr. MacEwan had said with reference to a too scientific standard was true, so long as the scientific information was not at hand, and we must for the present rely on technical methods. He agreed with Mr. Parry about the results obtained by various workers with the iodine-absorption method.

CAMBRIDGE PHARMACEUTICAL ASSOCIATION.

THIS Association has had a paper on "How to Form an Herbarium," from Mr. G. T. Branch, winner of the Pharmaceutical Society's bronze medal for herbarium in 1892. For collecting, he advised the use of a digger (in the form of a large bradawl), a vasculum and a smaller tin for fragile plants. Typical specimens showing all the different parts of the plant when mature should be sought for. For pressing and drying, a box containing pebbles, &c., and several boards are as good as more expensive arrangements. A newspaper, thoroughly dried, answers admirably to place between the plants. He advised frequent overhauling, re-arranging, and changing during the process of drying, and in many cases the use of pads of cotton wool and tissue paper. To enable the flowers to remain in their natural colour, he used a heated flat iron. Some specimens, too succulent for ordinary pressing, had to be sliced down the centre, such as the broom rape, butter burr, &c. In mounting great care is needed. Mr. Branch advised the use of thin glue in preference to gum and in some cases slips of gummed paper. He recommended Bentham's "British Flora" for naming, and the "London Catalogue" for classifying. On Thursday, March 2, a smoking-concert was held, at which Alderman Deck presided.

THE MIDLAND COUNTIES CHEMISTS' ASSOCIATION.

A MEETING of the Council of this Association was held at the Mason College on March 1—Mr. C. Thompson, President, in the chair.

A report was submitted from the "Reconstitution Committee" by Mr. R. D. GIBBS. It was proposed to change the name of the Association to the "Midland Pharmaceutical Association"; to have a room or rooms where the library and museum may always be accessible to the members, in conjunction with which a Pharmacy Club may be in time established; to make eligible for membership all engaged in pharmacy within a radius of thirty miles of Birmingham, annual fee 2s. 6d.; to invite donations, and suggesting, as a nucleus for this fund, that each councillor shall subscribe half a guinea; to elect on the Council (a) two members for each of the Parliamentary divisions of Birmingham and Aston, one of whom shall retire annually; (b) one representative from each of the Parliamentary divisions within the above radius; members in each division to elect their own representative. Mr.

Gibbs explained the reasons which had led the committee to propose the above changes. An animated discussion followed, in which the whole of the members present took part. Letters from Messrs. Barclay, Magor, and Taylor, offering suggestions for and against the report, were read and fully discussed. An amendment to raise the subscription to 10s. 6d. was lost—three voting for and seven against. The general expression of opinion was that when the Association was able to offer greater advantages and privileges, the subscription might be reconsidered. Ultimately the proposals were unanimously approved, and the committee were requested to construct a more detailed scheme on the above lines for presentation to a special general meeting to be held shortly. Amongst the other subjects for discussion were railway rates, appointment of the recreation section committee, early and Sunday closing. With regard to the last-named, a resolution was passed advising members to close their respective establishments entirely on Sundays, and only on application to supply such articles as were absolutely necessary. The President laid on the table correspondence dealing with the question of territorial representation, but owing to the lateness of the hour deferred his remarks thereon to a subsequent meeting.

GLASGOW PHARMACEUTICAL ASSOCIATION.

AT the fortnightly meeting of this Association, on March 2, a discussion, arising out of Mr. Rutherford Hill's paper, took place on the relationship existing between the Pharmaceutical Society and the general body of chemists and druggists. The first speaker was

Mr. RUSSELL, who asserted that there was a want of vitality in the Society, and an evidence of non-affinity between it and the trade generally. In his view, the fees charged by the Society were a great hindrance to druggists joining the Society, and he raised a laugh when he said that were there no fees every member of the trade would associate himself with the Society. The majority of young fellows in Glasgow looked upon the Pharmaceutical Society, to some extent, as an examining body, who scooped them out of some of their dollars. Mr. Russell went on to criticise the Society's journal, and to advocate that candidates for the Council should address the constituencies whom they proposed to represent.

Mr. ROBINSON said that what the body of chemists and druggists wanted of the Pharmaceutical Society was that it should be more of an inland revenue office, persistently dogging offenders against the Pharmacy Act. (Hear, hear.) Such work as was presently done by the Secretary and Assistant-Secretary was, he thought, very derogatory to the character of men like Mr. Bremridge and Mr. Hill, who were really scientists. It was degrading to men of their character to be going spying about like policemen. The Society should institute a detective department.

Mr. BOYD remarked that the great thing was to get into the Pharmaceutical Society, and mould its policy for themselves. Commenting on prosecutions Mr. Boyd said it seemed to be admitted in high quarters that in Glasgow there was glaring disregard of the Pharmacy Act. Why, then, did they not take steps to put an end to it? Another point with which he dealt was the Preliminary Examination fee, which, he said, ought to be reduced to a guinea. It did not seem quite right to make so much profit out of the apprentices.

Mr. MOIR thought the active government of the Pharmaceutical Society should no longer be restricted to Major men, but should be thrown open to the general body of chemists and druggists. He urged that chemists' associations throughout the country should bring pressure to bear upon the Government to have the Companies Act amended.

Mr. FOSTER, who said he had been a member of the Society since 1870, advised the Glasgow chemists to join the Society.

Mr. GEORGE ROBERTSON suggested that chemists in business should try and prevail upon medical men to get their patients to boycott the drug-stores and get their medicines from legitimate druggists.

Mr. LAING maintained that the drug-trade was as bad as bad could be, and that something decisive was needed to improve matters.

Mr. W. L. CURRIE, the President, closed the discussion, urging upon the Glasgow chemists to associate themselves with the Society. In the course of his remarks he referred to the drug-shops kept open by doctors in Glasgow and suggested that, as an association, they ought to take that matter up and have it stopped. They should present a petition signed by every chemist and druggist in the West of Scotland to the Pharmaceutical Society to state a clear case to the British Medical Council with a view to having medical men conform to the Act of Parliament and stop keeping open shop for the sale of drugs to the public. As he read the Act, doctors had simply power to keep open shops for the dispensing of drugs to their own patients. (Hear, hear.)

EDINBURGH CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.

A MEETING was held on Wednesday, March 1, Mr. W. B. Cowie in the chair. A paper on

NEW REMEDIES

was read by Mr. ALEX. J. DEY. In this the author described the following:—

Iodopyrin, or *Iodoantipyrin*, which is antipyrin with one hydrogen atom of the benzene nucleus replaced by iodine. It was first made by Dittmar. It occurs in tasteless, colourless, prismatic crystals, sparingly soluble in water or alcohol, but readily so in hot water. It melts at 160° C. It is probably decomposed in the stomach into antipyrin and iodine. In doses of 7 to 22 grains it reduces temperature in typhoid fever and phthisis without unpleasant effects. It is best dispensed in cachets or capsules.

Salophen, or *Acetyl-para-amido-phenol-salicylic-ester*, may be regarded as salol in which an atom of hydrogen in the phenyl group is replaced by the univalent group (NHCOCH₃). It crystallises from alcohol or benzol in neutral, odourless, tasteless, small thin plates melting at 187° to 188° C., nearly insoluble in cold, slightly in hot water, and readily in alcohol or ether. It contains the equivalent of 51 per cent. of salicylic acid. It is said to be distinguished from salol by not giving the violet colour with ferric chloride, but the author has not found this to be the case, as both substances give exactly the same colour. The dose is 10 to 30 grains in tablet, cachet, or capsule.

Alummol, or *Naphthol-sulphonate of aluminium*, has been introduced as a fine white powder, readily soluble in water and to some extent in glycerine or water. It is non-poisonous except in large quantity introduced into the stomach or hypodermically. It is being prescribed by dermatologists, but its compatibilities do not seem to be well understood. The author had the following prescription to dispense:—

Sapo mollis, B.P.	..	..	..	..	5ij.
Sp. vini rect.	..	..	..	..	3ij.
Solve et adde—					
Alummol	..	..	..	..	5 per cent.

The mixture is first creamy, then turns almost solid, and finally separates into a thick sticky mass and a clear liquid—a result probably due to separation of aluminium hydrate in a gelatinous form owing to the alkali in the soft soap. The author also referred to agathin, dermatol, salipyrin, and a few other remedies which have recently been described in this journal. Following this Mr. J. D. PETRIE read a paper on the history and manufacture of soap. Discussions followed.

MANCHESTER PHARMACEUTICAL ASSOCIATION.

The closing meeting of the session of the Manchester Association was held on Wednesday night at the rooms of the Chemical Club, Victoria Hotel. Mr. G. S. Woolley presided over a fairly large muster of the members. The first business was the election of five new members and one associate. This item has appeared on the agenda of every meeting held during the session, and appears to indicate that the Manchester organisation is in a fairly hopeful condition. It was expected that Mr. Siebold would have been present to read a paper, but he has been in ill-health for some time and his contribution has had to be held over till next session. In the absence of any paper the members devoted themselves to a discussion on points arising out of the judgment in the case of the Pharmaceutical Society against Piper & Co.

BRIGHTON JUNIOR ASSOCIATION OF PHARMACY.

THIS Association held a successful social and musical evening on March 1. Mr. A. E. Colman (President) presided.

Business Changes.

THE SUSSEX CO-OPERATIVE DRUG COMPANY have opened a branch establishment at 58 Terminus Road, Eastbourne.

Mr. F. BARTON DELL, late of Perry Hill, Catford, has purchased the business of Mr. W. S. Sale, of 148 King Street, Hammersmith, W.

THE Southampton Drug Company, which is now styled "Day's Southern Drug Company," is about to open another branch in Bevois Valley.

THE old-established business of the late Mr. W. J. Foulkes, Grange Mount, Birkenhead, has been purchased by Mr. James Walker, Galashiels.

MR. HAY M. MARSHALL, late senior dispenser with Messrs. Squire, Oxford Street, London, has acquired Mr. William Duncan's branch pharmacy at Hill Street, Clapton, N.E.

MESSRS. HUGHES & Co., chemists, have lately removed from their old place of business, at 3 Canute Road, Southampton, where they have been for the last nineteen years, to more suitable premises next door. They are exactly opposite the docks.

THE business of Mr. A. H. Hetherington, Frankfort Pharmacy, Plymouth (who is retiring), has been purchased by Mr. Thomas Newton Andrews, who served his apprenticeship there, and has since been some years with Messrs. Hodgkinsons, Treacher & Clarke.

Gazette.

PARTNERSHIPS DISSOLVED.

Cooper, H. P., and Wood, J. W., under the style of the London Pure Drug Company, Hoxton, manufacturing chemists.

Harrison, W. G., and Gill, A. R., under the style of Harrison & Gill, Birmingham, manufacturing chemists.

Holder, W., and Hollingworth, J., under the style of Holder & Hollingworth, jun., Kingston-upon-Hull, surgeons.

Willcox, J. H. B., and Young, C., under the style of Willcox & Young, Bristol, mineral-water manufacturers.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDERS.

Cole, William Browne, Bishopstou, Gloucestershire, late of Bristol, vendor of horse and cattle medicines.

Potter, Herbert, Sutton, chemist.

The following amended notice is substituted for that published in the *London Gazette* of February 24:—

Gascoine, Edward (trading as the English Yeast-manufacturing Company), Lenton, formerly trading with Samuel Morley, as the Nottingham Vinegar-brewery Company, as vinegar-manufacturers, at Kyte Street, Lenton, all in Nottingham, yeast-manufacturer.

ADJUDICATIONS.

Cole, William Browne, Bishopstou, Gloucestershire, late of Bristol, vendor of horse and cattle medicines.

Ruggins, William Henry (described in the receiving order as Huggins, W. H.), Dorset Road, South Lambeth, vinegar-merchant.

Willson, William Joseph, Oxford, chemist and oil and colour man.

The following amended notice is substituted for that published in the *London Gazette* of February 24:—

Gascoine, Edward (trading as the English Yeast-manufacturing Company), Lenton, formerly trading with Samuel Morley, as the Nottingham Vinegar-brewery Company, as vinegar-manufacturers, at Kyte Street, Lenton, all in Nottingham, yeast-manufacturer.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Souter, Edwin, Dorking, mineral-water manufacturer—discharged suspended for three years.

THE POST-CARD COMPETITION. (VALENTINE VOX POPULI COMP.)

THE popular vote is a fickle deity to worship. One day the author of "The Jumping Frog" had his ire aroused by what he stigmatised as the abnormal largeness and rankness of the Californian season's crop of poets, and accordingly went for them in a spirited essay. That essay frequently crossed the mind of the member of our staff to whom had been delegated the duty of a Returning-officer in the Valentine competition. It was not, of course, the rankness of the Valentines—it was the provoking waywardness of taste of the voters, that compelled him often to repress rising feelings of wrath as his pencil wandered across from sixties to thirties, and from fifties upward again to the lower numbers, ever at hide-and-seek with the figures on the sheet before him. Three hundred and twenty post-cards, aggregating 2,240 votes, had to be tabulated, checked, and ticked off, and till long past the middle it looked like a dead heat for crowns, though the guinea and half-guinea men were already sprouting up briskly from the cluster of their rivals. When at last the figures came to be cast up, this was the result:—

Number	Votes	Number	Votes	Number	Votes	Number	Votes	Number	Votes
28	114	36	53	34	29	48	16	58	7
29	83	19	51	39	29	21	15	64	7
62	81	53	48	59	29	32	15	35	6
3	76	20	46	7	28	14	14	33	5
63	75	38	46	10	28	16	14	43	5
11	74	6	45	42	28	57	11	25	4
24	73	66	44	31	27	4	10	45	3
49	67	41	40	51	23	52	10	46	3
17	65	54	37	37	25	22	9	60	2
56	65	26	35	27	24	40	9	13	1
1	64	61	30	5	23	47	9		
15	64	12	29	50	21	65	9		
2	63	18	29	23	20	9	8		
8	56	30	29	44	17	55	8		

We may as well say that we have had some hesitation about this plebiscite. If, as was hoped and expected, a Poet Laureate had been appointed before the competition came off, we should have retained his services for the selection of the prize men. To have done so would have been not only a fitting compliment to the sixty odd pharmacists who so gallantly bestrode their Pegasus in the tournament—it would also have been a considerate act to a Laureate just opening shop to start him with a little job at arbitration upon the merits of so many possible successors. But this was not to be, and so we must make the best of the Vox Populi. Knowing old Vox! why, it actually, by 114 votes, awards the first prize of one guinea to Mr. WILLIAM BOSTOCK, of Ashton-under-Lyne, for Valentine No. 28, addressed to the editor of THE CHEMIST AND DRUGGIST. Were it not that we are convinced that it is simply the merit of the verses, and not any desire of the competitors to pay a compliment to our journal, that has inspired this decision, we should have blushed audibly at this contingency. Nor would our discomfort have been lessened by the discovery that, by 83 votes, the second prize of half-a-guinea goes to SACCARUM LACTIS (Mr. Vernon, 413 Oxford Street, W.), for Valentine No. 29, on THE CHEMIST AND DRUGGIST handbooks. Once more we lay our right Manual limb upon our 'Art (of Dispensing), and protest solemnly that we cannot 'Alpe it, if we should fail to live up to such a refulgence of popularity.

Pass we on, now, to the crown-winners. Mr. A. OGLESBY, Cheapside, Barnsley, takes the first place here with 81 votes for his "doggerel" rhyme (No. 62), addressed to Sprat's (Limited). Then comes No. 3 (76 votes), in which R. E. B., Brighton (who will please send us his full name and address), sweetly and punningly trolls the praises of Messrs. Beecham, with one foot short in the first line. The vote is now again diverted into the channel of the kennel, 75 suffragants having placed Mr. ARTHUR HILL, 25 Costin Street, Bedford, into the fifth place, notwithstanding the flaw in the metre of

the sixth line of his description of the terrier fed on "Spratts'." From thence we pass on to "LUCIE," who secures 74 votes for No. 11, addressed to Messrs. Bowers Brothers' Coconut. We congratulate "Lucie" upon the measure of success which has attended this effort, and trust he (for the *nom-de-plume* belongs to Mr. W. E. CURTIS, 37 Fore Street, Totnes) will keep pegging away. "*Più de luce!*" as Galileo is said to have remarked, meaning, no doubt, "Let us have more of Lucie."

Bang goes the last crown!—off to Scotland—into the pocket of Mr. ALEX. WHITELAW, East Linton, Preston Kirk, for Valentine No. 24, addressed to Burroughs, Wellcome & Co. (73 votes). We do not think we can be accused of "undue influence" by stating now, after the close of the poll, that these verses appear to us worthy of at least as many votes as have been recorded for them. Tennyson might, perhaps, have jibbed at the frequent repetition of the letter "s" in the first two lines; but Mr. Whitelaw is clearly a versificator of no mean ability. But what is this about "the maiden Ruth"? And from a Scotchman, too! Ruth, when she gleaned her kinsman's barley, was a widow who had been previously married for ten years, as anyone may read in the charming chronicle of her life. Let us hope, too, that the modern Abraham's servant will not quaff the whole pitcherful of "Franz Josef" at a draught.

"They also," says Milton (we may be excused for dropping into poetry ourselves in this atmosphere)—"they also serve who only stand and wait"—and we trust that the half-dozen competitors who have just failed to get in will not be discouraged by having to stand outside the Gates of Reward and await their turn until they reopen at some future time.

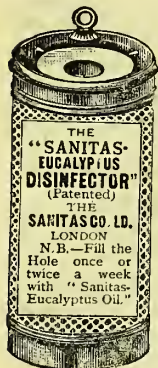
There has been some remarkable cross-voting in this competition, the consideration whereof brings us to the second award we have to make. Every competitor has had, we see, at least one vote awarded him. Until nigh upon the close of the competition it seemed as if three or four poetical cucles would be adjudged so poor that none would do them reverence, but, happily, to parody another line, "to every one upon the list a vote came soon or late." To our mind the valentines that have secured the fewest votes comprise some by no means deserving of their lowly lot. And even these neglected competitors should persevere. Mayhap they are not destined ever to range the Parnassian heights with the elect Seven, or even see their fame rank with that of "Henry Wadsworth, Poet Close, or Mister Tupper"; still, by pegging away, they may one day come to rival the genius who "writes the lovely cracker-mottoes my Elvira pulls at supper," and that should be consolation enough. Several competitors have swollen their numbers by voting for themselves—early, if not often—and getting their friends to do so too. That, we expressly stated, we consider legitimate; but, when a large and flourishing family in Birmingham sent a single post-card signed by six of its members, all voting for one valentine, and one only, we were compelled to reject so flagrant a case of plurality. Again, five cards, all apparently in the same handwriting, were received simultaneously from one district, voting for almost the same numbers, and all these were rejected because they were unsigned.

One competitor is still suffering from a bad attack of rhyming fever. This is how he votes:—

Since C. & D. the arduous task declines,
We'll try to mark the seven best Valentines.
First "A. & H.," "the Historic House," we name;
Second, "B. W." of "Malt" and "Tabloid" fame;
The brown-faced "Cocoa-nut" we next propose,
From whose white heart sweet milk of kindness flows!
Then you, dear Editor, our faithful friend,
And last, the "books" you w'sely recommend.

Not one of the competitors has named all the seven prize-winners, or even six of them. Most of them hit only two or three of the number, and only nine managed to guess four apiece. Two name five, and to each of these we will send half-a-guinea. They are:—Mr. JOHN T. SUTHERLAND, 118 Rosemount Viaduct, Aberdeen, and Mr. G. A. HEBBLETHWAITE, Drypool, Hull.

THE POLLEN OF FLOWERS contains a considerable percentage of the yellow colouring-matter called carotin. Bertrand and Poirault have recently investigated the matter (*Compt. Rend.* cxv. 90).



"SANITAS-EUCALYPTUS DISINFECTORS"

(PATENTED).

An Automatic Appliance for Disinfecting the Air, and Scenting Rooms, &c.

Price 1s. each.

"SANITAS-EUCALYPTUS OIL,"

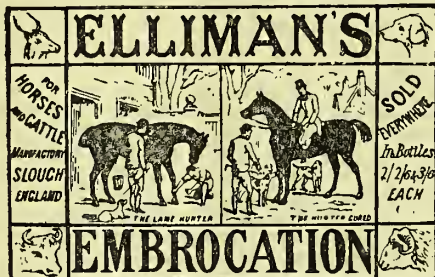
For charging same, and for use in place of ordinary Eucalyptus Oils.

In 1s. Bottles.

THE SANITAS CO. (LIM.),
BETHNAL GREEN, E.

See pages 72 and 73 of the Winter Number, January 28, 1893.

SHOW CARDS, 24 × 17 or 17 × 12,
Sent to any address in the United Kingdom.



See first page, facing inside of front of cover, of first issue in this month, for latest particulars.

A POSITIVE PAIN - KILLER.

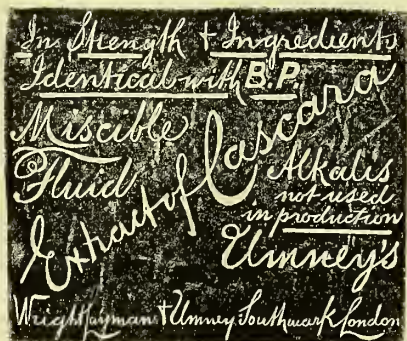
GORDON STABLES, M.D., R.N.

DAY'S OIL OF THE NIGHT

Is an Embrocative Balm for the People, and a source of profit to the Retailer.

1s. 1½d. and 2s. 9d. NO CUTTING. [2]

DAY & SONS, CREWE.



LONDON AND LANCASHIRE FIRE INSURANCE COMPANY.

Head Offices { 45 DALE STREET, LIVERPOOL.
74 KING WILLIAM STREET, LONDON.
West-end Branch: 26 PALL MALL, S.W.

Annual Income ... £801,000.
Funds in Hand ... £1,026,000.

Premiums Moderate. Losses settled with promptitude and liberality.

Applications for Agencies specially invited from Chemists and Druggists in both Town and Country Districts.

MOSS'S

Mixes with Water.
Certain and Pleasant.

MISCIBLE

"A great Improvement."

(REGISTERED)

CASCARA

"THE BEST OBTAINABLE."
Dr. Gilchrist,
Omagh.

Through any Wholesale House, or from the ONLY MAKERS—

JOHN MOSS & COMPANY,
Galen Works, New Cross Road, LONDON, S.E.

CHASSAING & CO.'S PEPsin, PEPTONE, PANCREATINE
8 Avenue Victoria, PARIS
Sole Agents for the United Kingdom, Furst Brothers, 17 Philpot Lane, London, E.C.
(See Advert., Fourth No. of this Journal each month.)



MEDICAL ELECTRICITY.



EVERY DESCRIPTION OF
Galvanic, Faradaic, and Electro-Magnetic
Machines and Electrodes, Galvano-Cautery and
Lighting Instruments.

Lists Free. Descriptive Catalogue, 100 Illustrations,
32 pages, 4 stamps.

GENT & CO., LEICESTER.



NOVELTY.

"HYDANA BOUQUET"

An entirely new
persistent perfume.
Packed in a novel manner, in handsome 2-oz. Amber Flasks.

SELLING AT SIGHT. Value unprecedented.
Sample dozen, cash, 8/. GREAT DEMAND.
SANDOID & CO., 25 Clerkenwell Road, LONDON, E.C.

ON RECEIPT OF POSTAL ORDER FOR
20/-

We will forward TWO GALLONS of
PRIZE FORMULA COUGH MIXTURE
Prepared with Fletchers' Concentrated Liquors.

FLETCHER, FLETCHER & STEVENSON,
21 MINCING LANE, AND HOLLOWAY, LONDON, N.

Editorial Comments.

PLUMBIFEROUS ACIDS.

THE discussion of Monday evening on Mr. Warrington's paper regarding the detection of lead in citric and tartaric acids was somewhat tame, and was chiefly notable for the opinion of Professor Attfield on the matter, as expressed in a letter

addressed to Mr. Warington. We presume that we may take Professor Attfield's opinion as a semi-official pharmacopœial dictum on the latter. When Mr. Warington's paper was read a month ago we mentioned that the matter was one which very intimately concerned the British Pharmacopœia, for it has been owing mainly to the looseness of the pharmacopœial tests for lead, and the ample shelter which has thereby been given to plumbiferous citric and tartaric acids, that recent notorious proceedings have taken place. There are four points which Mr. Warington has admirably demonstrated in his paper:—First, that the B.P. tests are vague and unsatisfactory; second, that commercial acids—English, French, and German—contain lead in notable and reducible quantity; third, that the acids can be and are freed from lead without adding materially to the price; and, fourth, that as little as 1 of lead in 1,000,000 of acid can be detected and estimated. He has stated in precise terms what are the best conditions for testing. Professor Attfield's response to this useful contribution to the improvement of pharmacopœial methods, as far as it was read at the meeting, is disappointing. It is a mere sophism to say that "the statements of the British Pharmacopœia respecting citric and tartaric acids that an aqueous solution is not altered by sulphuretted hydrogen mean obviously that the compilers do not recognise the presence of lead, tin, or copper in either of them." It is a matter of wide experience that samples of the acids undoubtedly containing lead can be passed by the B.P. test, if attention be not paid to certain conditions as to the strength of the aqueous solution and the manner of applying the sulphuretted hydrogen. Mr. Warington has put in black and white the conditions under which lead in these remote traces may be detected or may escape the notice of the analyst, and the demand that the Pharmacopœia should specify adequate conditions is not satisfied by Professor Attfield's statement that the Pharmacopœia places "no reservation as to the strength of the aqueous solution, or as to the reagent being dissolved or in bubbles." We presume that what Professor Attfield means by this is that if John Brown thinks Mr. Warington's conditions conform well with the broad outlines of the B.P. he may use them. The only objection is that everybody is not John Brown. There are Thomsons and Smiths in the trade who do not choose to recognise such stringent conditions, and are thereby enabled to say that acids are "B.P." An aqueous solution may be a grain in a gallon or an ounce to the pint—margin sufficient to them for escape. While that state of things lasts the Pharmacopœia is detrimental to the public interests, and it is because it is so used that it appears to us desirable that the tests under discussion should be revised and clearly defined. By all means exclude lead absolutely, but show us by good tests how we are to know when that is done.

CHEMISTS AND RAILWAY RATES.

WHILE the contest between traders and railway companies is proceeding, and even when it is settled, there are opportunities of preventing leakages and overcharges in the item of carriage which should be closely watched by all business men. We have published lately several useful hints in regard to empties. One was that it ought to be a fixed rule with all wholesale houses to attach their own names on tallies inside all packages charged for, with a number or some other means of identification. This plan is adopted by many houses, but not by all. Another, and perhaps a still more useful suggestion is that in view of the new charges for carrying empties, whole-sale houses should, wherever it is possible, pack goods in packages of practically no value, such as orange-boxes, &c. Some other hints might be made.

It would be useful, for instance, if wholesale houses would add to all invoices of goods the gross weight of the various packages, and thus enable their customers to check the railway company's weights and charges on delivery. It is not all houses who take the trouble to fill in the weights on the consignment-forms; some leave it to the railway company, whose men, in the pressure of business, are not over particular, but generally manage to err in favour of the company.

Chemists should take care to procure from their local railway company a copy of the new scale of charges for goods under 3 cwt., and make it an invariable custom to check all weights and charges for carriage. The old scale was for packages under the denomination of "smalls"—i.e., under 500 lbs. in weight—but the limit is now 3 cwt. Above that limit packages are now charged at tonnage rates. Compared with the old scale, the new one is not to the advantage of the trader. The scale is a list of the authorised charges for all packages of goods sent by goods-train from 1 qr. to 3 cwt., rising by stages of 14 lbs. A package weighing 2 qrs. 16 lbs. is charged as 3 qrs., and no package is charged for at a less weight than 1 qr. The charges are very arbitrary—thus 1 cwt. at, say, 50s. per ton would reckon out exactly at 2s. 6d. per cwt., but according to the scale it is 3s. 3d. Again, 1 qr. at the same rate is charged 1s. 5d., 1 qr. 14 lbs. 1s. 9d., and 2 qrs. 2s., and so on all through the scale, beginning with goods at 3s. 4d. per ton, and ending with charges at 150s. per ton. In many cases where the rates have been reduced on goods, the advantage is minimised by the higher-scale charge. Take a case where a rate has been reduced from 60s. to 50s. 1d. According to the old scale 2 qrs. at 60s. would be 2s. 2d., but on the new scale 2 qrs. at 50s. 1d. is still 2s. 2d. For 2 qrs. 14 lbs. at 60s., old scale, 2s. 6d.; new scale, 2 qrs. 14 lbs., 50s., is 2s. 5d.—a saving only of 1d. on a reduction per ton of 19s. 11d. In cases where the rates remain unchanged, the new scale works out to the disadvantage of the trader. For instance, 2 qrs. 14 lbs., 62s. 6d., old scale, was 2s. 7d.; new scale, same weight, same rate, is 2s. 11d. Of course, as the weights get higher the difference is not so great. Thus, 3 cwt. at 60s. was 9s. 6d. old scale, by the new scale, same weight, at 60s., it is 9s. 10d. Where the rates have been increased, the increase is observable all through.

That the railway companies intended to compensate themselves for reductions wrung from them by influential trades by turning the screw on "smalls" was what we prophesied all the time the Commission was at work, and we do not believe that the new rates will be substantially modified. But something can be done by closely checking charges and having all mistakes rectified before paying. Where much business is done it is best to have an authorised ledger monthly account, and go carefully over every item, comparing it with the scale-charge and the previously ascertained rate for the goods in question. A form can be obtained from the railway company, and for 6d. fifty rates can be ascertained; single rates are supplied gratis.

A correspondent who writes to us on this subject makes the following remarkable statement:—"For over twenty years I have checked a monthly account from our railway company, with, perhaps, a hundred items in each account, and in no case have I had an absolutely correct account rendered. The errors were almost always in favour of the railway company." That is a piece of experience which is worth bearing in mind.

AMERICAN FREE TRADE.

THE adoption of the McKinley tariff by the United States Legislature was hailed by a good many far-seeing free-

traders as an event which must accelerate the reform at which they aimed. It has proved to be such. A considerable majority of the American people have deliberately voted for a President who made free trade one of the principal planks of his platform, and who has shown by his inaugural address last Saturday that he regards the fulfilment of his professions in this respect as a solemn duty which his party have incurred. That President Cleveland is a convinced free-trader we may assume from the following sentences quoted from his address. Having declared that his party were pledged in the most positive terms to tariff reform, and indicated that they should proceed with their task on principle and not vindictively, he said:—

If in lifting the burdens from the daily life of our people we reduce inordinate and unequal advantages too long enjoyed, this is but a necessary incident of our return to right and justice. When we tear aside the delusions and misconceptions which have blinded our countrymen to their condition under vicious tariff-laws, we but show them how far they have been led away from the paths of contentment and prosperity. When we proclaim that necessity for revenue to support Government furnishes the only justification for taxing the people, we announce a truth so plain that its denial would seem to indicate the extent to which judgment may be influenced by familiarity with perversions of taxing-power; and when we seek to reinstate the self-confidence and business enterprise of our citizens by discrediting abject dependence upon Governmental favour, we strive to stimulate those elements of American character which support the hope of American achievement.

That the American protected industries will not yield their advantages without a severe struggle may be assumed; but that the United States will be ere long a free-trade nation we take to be absolutely certain. This by itself will have an immense influence on the commercial relations between the Eastern and the Western worlds, and that influence will be contagious. A number of British colonies have chosen the United States as their model, and have adopted the economical fallacies as well as many of the more valuable qualities of the Federation. These will have to reconsider their views, and it is not by any means unlikely that before this century closes the whole of at least the English-speaking world will have become linked in a common commercial union, the basis of which shall be not uniform duties, but the utmost freedom of competition, inviting the whole earth to contribute its products without any restriction for the mutual advantage of every section thereof.

WHY WAIT FOR THE PUBLIC PROSECUTOR?

IN concluding his narrative of the case which the Pharmaceutical Society had just won, Mr. Carteighe is reported to have told the Council last week that it was possible they might get further instructions from the Public Prosecutor. What was the meaning of this allusion? Surely the Council do not intend to wait for orders from that notoriously lethargic official before following up the advantage they have gained. We have often expressed the opinion that in view of their many years of acquiescence in the stultification of the Act as far as proprietary medicines were concerned, it was politic, and perhaps just, to wait for some outside pressure before taking the proceedings. But the pressure has been exercised, and the point of law involved has been judicially interpreted. The grocers have fought their hardest, and they are now quite ready to recognise their defeat. It will be a thousand pities if a lax administration of the law should tempt them to again trespass on paths which are legally closed to them. It will be a gross abandonment of duty if the Pharmaceutical Council neglect now to enforce

the Pharmacy Act resolutely as regards all proprietary medicines containing poisons, and there seems to be no occasion whatever, from any point of view, for the further interference of the Public Prosecutor.

MR. HARNESS AND HIS CRITICS.

We have received a long lithographed letter from Mr. C. B. Harness, of the "Electro-pathic Institute," referring to "the misrepresentation and the vindictive tendencies" of his "prejudiced critics," announcing his gracious willingness to "permit an appointed commission of unprejudiced scientific and medical men to make the fullest investigation, so as to prove or disprove, scientifically, the generation of electricity from my appliances, and medically the remedial value attaching thereto, and to the treatment adopted by the physicians attached to our institution." The Medical Battery Company (Limited) even offers to defray one-half the cost of such commission! In view of the impudent use which Mr. Harness made of the evidence which Lord Kelvin gave against his belts, advertising an extract from it as if Lord Kelvin had given a testimonial in favour of his appliances, this astute individual can hardly expect that his proposal will be taken seriously by anybody whose opinion is worth having.

TEUCRIN.

In the *Wiener Medizin-Blättern* Professor von Mosetig, of Vienna, calls attention to the extract of wood sage (ext. *teucii scordii*) as a local remedy for infectious ulcers—so-called mycotic diseases. The sterilised extract, purified by alcohol, as brought into commerce by a Vienna pharmacist, is of the consistency of honey, and has a specific gravity of 1.15. It is a dark-brown fluid of aromatic flavour and sharp taste. It colours blue litmus red, and the free acid which it contains requires for saturation 11.4 c.c. of deci-normal soda solution for every 10 grammes of extract. The residue, after drying, is 20.8 per cent., and it yields 4.6 per cent. of ash upon incineration. The medicinal action of the remedy is said to be that by increasing and strengthening the circulation of the blood it cuts off the possibility of the expansion of ulcerating fungoid growths. Other species of *Teucrium* are said to possess the same medicinal property. The *Pharmaceutische Zeitung* protests against the use of the name "teucrin," which has been given to the preparation by its maker.

A PLEASANT TESTIMONIAL.

They are not a very squeamish kind of people in Brazil, and a British visitor to Rio, even if he cannot read Portuguese, is apt to sustain frequent shocks to his notions of propriety. But we have rarely met with a more curious instance of unblushingness than we encountered in a calendar which has just been sent to us by a pharmacist in Rio Grande do Sul (Brazil), who distributes this little book gratuitously, by way of advertisement, among his patrons. The calendar, which contains the usual medley of information, interspersed with advertisements, is adorned by three photographs. One of these represents the proprietor, the second his "administrador technico," and the third is that of a citizen who is named in full, and whose claim to fame rests upon the fact that, below his portrait, he publicly acknowledges his indebtedness to the pharmacist for having "completamente" cured him of syphilis after six years of suffering by a course of one of his elixirs.

LETHARGIC PHARMACY IN HOLLAND.

The average continental pharmacist still clings dearly to his professional dignity. In his eyes the maintenance of the dignity entails the public manifestation of abhorrence for anything so vulgar as the advertising of pharmaceutical preparations; hence, whenever an apotheker breaks through

the icy ring of etiquette and starts boldly upon a career of publicity his colleagues gather their robes of righteousness closer around themselves and point the finger of obloquy at the offender. There is a progressive chemist in Holland just now who has commenced to put up liquid extract of cinchona (*De Vrij*) in bottles of a peculiar shape, and advertises his preparation as "the genuine" one. Dr. *de Vrij* himself states that when the pharmacist gave him notice of his intention to bring out this speciality he disapproved of it, but it is not denied that Mr. Nanning, of the Hague (the chemist in question), has as good a right to put up the extract as anyone else. For advertising it he is, however, publicly held up to contempt in the *Dutch Journal of Pharmacy* by two other pharmacists, who propound the extraordinary doctrine that "the advertising on a large scale of any remedy—in other words, the recommending of medicaments otherwise than by a physician, is quackery."

Legal Reports.

SALE OF POISONS BY A COMPANY.

At the Cardiff County Court on March 2, before his Honour Judge Owen, the Pharmaceutical Society of Great Britain sued William F. Lloyd Smith, manager of a company styling itself the *Thorasine Drug Company*, carrying on business in Tudor Road, Cardiff, to recover certain penalties to which he had rendered himself liable in having illegally sold poison.

Mr. Grey, barrister, appeared for the plaintiffs.

Before the opening of the case, defendant said he desired to ask his Honour if these penalties were recoverable in a civil or criminal court.

His Honour: It has been solemnly decided by the High Court of Justice that these penalties are recoverable in the county court. Are you subject to the penalties?

Defendant: No. I deny the sale.

Charles John Ball, who described himself as a traveller, residing in Stoughton Street, was then called. He said the defendant kept a chemist's shop in Tudor Road, called the *Thorasine Drug Company's Stores*. He visited the shop on December 20, and purchased from the defendant twopennyworth of laudanum. The bottle produced was the one containing the poison. There was no label on it.

His Honour (to the defendant): You must be careful, or you will get into trouble, selling poison in this way.

Mr. Grey: To sell without a label is another infringement of the Act, but we are not pursuing that to-day.

Witness said on December 28 he went again to the defendant's shop, and asked for another twopennyworth of laudanum. Defendant served him, putting the poison into a small bottle. There was a label on that, "Poison. From the *Thorasine Drug Company's Stores*."

His Honour: What is the meaning of the word "*Thorasine*"?

Mr. Grey: I really don't know.

Defendant: It is very easy to get at the root of the word. "*Thora*," thorax, throat. (Laughter.)

Witness continued: On January 2 he went again to the defendant's shop, and purchased another twopennyworth of laudanum. There was the label "*Laudanum*" on that bottle, but not the word "poison." On January 17 he paid another visit to the defendant's shop, and asked for twopennyworth of laudanum. The bottle (produced) was labelled in the same way as the previous one. He sealed up all the bottles, and on January 18 handed them to Mr. Moon.

Defendant: Didn't you tell me you were out of work, and having heard that I was engaging someone to deliver bills, you had called to see if I would give you a job?

Witness: No.

Defendant: And didn't you tell me that you had a bad toothache, and ask me to give you something, and I gave you some laudanum?

Witness: That is not so.

Defendant: And didn't you ask me how much it was, and I said, "Nothing," and you then thanked me?

Witness: That is wrong. It is a barefaced lie. I paid 2d. for the laudanum on each occasion.

Defendant: I can bring two witnesses who were present at the time to prove it.

Mr. Harry Moon said he was a clerk in the office of the Registrar of the Pharmaceutical Society. On January 18 he received the four bottles (produced) from the last witness. They were all sealed. He kept the bottles in his possession till February 24, and then delivered them to Mr. Eastes for analysis.

Mr. Ernest J. Eastes said he was an analyst, a Fellow of the Institute of Chemistry, and an assistant to Professor Attfield. He had analysed the samples, and found that they were all preparations of opium.

His Honour: Was the laudanum of the same quality as that mentioned in the *Pharmacopœia*?

Witness: Yes.

Mr. Grey put in the registers for 1892 and 1893 in neither of which, he said, did the defendant's name appear.

His Honour: What is the breach you are going for?

Mr. Grey: For selling poison, not for keeping open the shop. It came under section 15. The offence was selling poison by a person not duly qualified so to sell. There was an authority on the point—that of the Pharmaceutical Society *versus* Wheeldon. In that case the offence was not so bad, because there was a qualified man in the shop there, and it was the assistant who sold the poison while the chemist was away. In the present case there appeared to be no qualified person at all in the shop.

His Honour (to the defendant): Are you a duly registered pharmaceutical chemist?

Defendant: No.

His Honour: Did you you sell this laudanum?

Defendant: No; I did not. I gave it to the man. He came into the shop, said he was without money, and asked for employment, and I gave him the laudanum as he said he had the toothache.

His Honour: Did he come into the shop on four different occasions, say that he was without employment, and ask for money?

Defendant (interrupting): He used to come into the shop every two or three days.

His Honour: And did you give him laudanum every time?

Defendant: Yes, and other medicines besides, because he told me he was out of work. I have a price-list of all the things I sold, and in that laudanum is not mentioned. I never did sell laudanum.

His Honour: What price-list is that?

Defendant: The price-list of the company for which I am manager.

His Honour: Do you want me to believe that this company keep a preparation of opium which they give away?

Defendant: I can give away what I like, I suppose?

His Honour: Answer the question, sir. Do you wish me to believe that this company keep laudanum for the purpose of giving away?

Defendant: It was not for sale. It was on the premises for the purpose of being put in a specific which the company make, and which contains laudanum.

His Honour: And they sell this specific?

Defendant: Yes.

His Honour: That will do. Call your witnesses.

Defendant: I have no witnesses. I did not think it necessary to bring any. But I can get a witness to prove that no money passed. He (the witness Ball) says he paid for the laudanum. Who saw him pay? Ask him that.

His Honour: He says nobody was in the shop at the time.

Defendant: Well, my word is as good as his. It is only oath against oath.

His Honour: There are the probabilities of the case to be considered. I think the Pharmaceutical Society have made out their case. The Act says that people who are not registered and duly qualified shall not be allowed to sell poisons. It has been proved to me by a respectable witness—it may be urged he is only a common informer, but he appears to be a respectable witness, and he swears—

Defendant (interrupting): He swears falsely.

His Honour: Hold your tongue, sir. He swears that you sold laudanum to him on four different occasions. Your defence—which I think is a very impudent defence—is that you did not keep this laudanum for sale, but that you kept

it in the shop for some other purpose, and that you gave it to the man on four different occasions. The man was sent to your shop by the Pharmaceutical Society to buy the poison, and there was no reason whatever why he should ask you to give it to him. I do not believe the defence, and I must give judgment, if the learned counsel presses it, for the full amount. (To Mr. Grey.) Do you press for the penalty in each case?

Mr. Grey: I am afraid we must. It is a very bad case. The Thorasinc Drug Company has not a registered chemist on the premises. Defendant seems to have done the whole business.

His Honour: And that makes it all the more dangerous in dealing with this poison. Judgment must be for the penalty of 5*l.* in each of the four cases proved. There have been two or three breaches of the Act besides this. (To the defendant.) I hope this will be a warning to you. If you are not careful, you will get into very serious trouble some day.

Defendant: How is the money to be paid?

His Honour: I have no voice in that. What are your wages?

Defendant: 1*l.* a week, and I have a wife and two children.

His Honour: I can't interfere. It is payable forthwith.

Mr. Grey applied for costs, which were allowed.

THE DESCRIPTION "DOCTOR."

At the Cardiff Police Court on March 2, Charles Graves, homœopathist, of Duke Street, was summoned for that he did on January 11, at Cardiff, unlawfully, wilfully, and falsely use the name or title of "Dr. Graves," thereby implying that he was registered under the Medical Act as a properly qualified practitioner. There was a further summons against him for that he did on the same date unlawfully, wilfully, and falsely pretend to be a doctor of medicine, contrary to the statute.

Mr. Showell Rogers, of Birmingham, prosecuted, and Mr. George David, solicitor, Cardiff, appeared for the defendant.

Mr. Rogers, in opening the case, produced the Medical Register for 1892, showing that the defendant's name was not on the register. It was alleged that on the date in question, two men, named Prevost and Matthews, acting upon instructions, went to the house of the defendant, and were there prescribed for as suffering from certain ailments, and supplied with bottles of medicine labelled in the usual medical fashion. They were given cards inscribed "Dr. Charles Graves, 10 Duffries Place, Cardiff. At home 9 to 10 and 4 to 5 daily," and also a leaflet on which the hours of consultation were again given. Mr. Rogers said no man had a right to style himself doctor unless he had obtained the degree of doctor of medicine. He quoted the case of *Ellis v. Kelly*, heard in 1860, in which the defendant was a licentiate of the Society of Apothecaries and also of the Royal College of Surgeons, and had also foreign degrees. He would have been convicted for styling himself "doctor" if he had not been in practice before the Act was passed. The Act provided that any man in practice before the Act came in operation should be exempted from its provisions. In that case, Baron Pollock said that the title of doctor must be taken to mean a doctor of medicine. In the present case, defendant did not merely take the title of doctor, but he practised medicine, and therefore his title must be taken to mean doctor of medicine. Mr. Rogers further quoted from the case of *Andrews v. Styrap*, heard in 1872, to show that if a man took the title of doctor deliberately, he must be taken to have done it wilfully, and that if he had not a diploma, he must be taken to have done it falsely. That was a case, he said, in which a man had used the title of "M.D." obtained from an American university—titles which could be had at 3*s.* 6*d.* per dozen, and which were not recognised by any Court in this country.

Walter Prevost, an army pensioner, of Newport, told how he took the other man, Matthews, with him to Mr. Graves's place. Matthews professed to be suffering with a cold. Graves examined him with a stethoscope and asked him if he felt any pain. Matthews said he did, and coughed. The doctor told him he was not to go out after dark, and prescribed a bottle of medicine, for which Matthews paid 1*s.*

A young man named Robertson mixed up the medicine, and gave it to Graves, who wrote out a label and put it on the bottle. The doctor had a book, in which he entered the patient's name, and made some notes. When going away Prevost asked Graves for his card, and he gave him three. He noticed several signs describing the place as the Cardiff Homœopathic Dispensary. Prevost said he had been to the same doctor by himself on previous occasions. Of these visits he gave details. In cross-examination he admitted all the statements he had made to the defendant about his own and his friend's illnesses were untrue.

Matthews's evidence corroborated that of Prevost. He told Mr. David that Prevost gave him 8*s.*

Mr. David submitted that the case had not been made out. The mere fact of a person's name not appearing on the register was not sufficient to warrant a conviction, and in support of that contention he quoted the case of *Pedgriff v. Chevallier*.

The Magistrates' Clerk said that case turned upon the fact of the insufficiency of evidence that the defendant was not in practice before the Act came into operation.

Mr. David submitted that it went further than that. The onus lay upon his friend to prove that the defendant wilfully and falsely pretended to be a doctor of medicine. He must show that the defendant was not a doctor of medicine. The only thing he did to prove this was to put in the medical register, but that was published at the beginning of last year, and was not the register at present in existence.

Dr. Paine (a magistrate) said the register for this year was not yet published, and therefore the register for last year was the register for the time being.

Mr. David said that register was not sufficient in the case of *Pedgriff v. Chevallier*. Justice Earle said, "The only facts are that he called himself a surgeon, and was not registered. I don't think that is enough." That case was conclusive against his learned friend. It was there decided that the production of the register was not sufficient. His friend must show that Mr. Graves was not a doctor. The offence charged against him was for holding himself out to be a doctor when he was not. They must by legal evidence prove that he not only held himself out to be a doctor, but that he was not a doctor. The register was not sufficient for that purpose.

Mr. Rogers said the case referred to was heard in May, 1860. In the case of *Ellis v. Kelly*, heard in November of the same year, the argument of the previous case was set at naught. If his friend's contention were right, they would have to bring witnesses from twenty different societies to show that the defendant held no qualification. He submitted that as soon as he produced the register, showing that the defendant's name was not on it, the onus lay upon him to show that he was qualified.

Dr. Paine agreed with that.

Mr. David then proceeded to argue that there was no reason why a man should not prescribe, and even see patients if he chose. But his friend said that the defendant wilfully and falsely pretended to be a doctor of medicine. The only circumstance upon which he relied to prove that was the production of the defendant's card. There was not a single case in which it had been held that the fact of a man putting "Dr." before his name made him liable to conviction. In the case of *Andrews v. Styrap*, the man put "M.D." after his name, but that was a very different thing. The title doctor might be used in numbers of cases. It was the practice amongst numbers of people to call medical men "doctor" whether they were entitled to it or not. They never raised any objection. He had always called Mr. Horder "doctor" and he never objected. In this case the defendant was not alone. He was accompanied by a gentleman who undoubtedly was fully qualified to practise. He referred to Dr. Robertson. Was not that so?

Mr. Rogers assented.

Mr. David: And it was in evidence that Dr. Robertson took part in these examinations. Whatever Mr. Graves did was done with the assent and under the superintendence of Dr. Robertson.

Dr. Paine: Does that constitute the right of your client to put "Dr." before his name? That is what we have to consider.

Mr. David said they had the fact that at the time this prescription was made up there was a fully qualified medical

practitioner present, who mixed up the medicine, and he submitted that an act done under the protection of a man properly qualified was sufficient to keep the defendant clear of the Act. He submitted, first, that the prosecution had failed to prove that Mr. Graves was not properly qualified; second, that the medical register was not sufficient evidence of that fact; third, that there had been no false pretence of any kind proved; and, lastly, that there had been no suggestion that the defendant held himself out to be a doctor of medicine.

The Bench said they would give judgment on Tuesday of this week.

On Tuesday, Dr. Paine (the presiding Magistrate) said the Bench had come to the conclusion that the defendant had committed the offence with which he had been charged. They imposed a penalty of 10*l.* and full costs, or in default of distress to commit him to prison for one month with hard labour.

Mr. George David said there were two summonses, and he asked the Bench upon which they convicted?

The Magistrates' Clerk: For unlawfully using the name of doctor.

CARTER'S MEDICINE COMPANY v. KNIGHT.

In the Chancery Division of the High Court of Justice, on Friday, March 3, before Mr. Justice North, it was arranged by consent that a motion on behalf of the plaintiffs to restrain the defendant from selling as Carter's Little Liver Pills pills which are not Carter's Liver Pills should stand till the trial of the action, without prejudice to an existing order with regard to security for costs. It was stated that there was a conflict of evidence, oath against oath, and that the matter could not be satisfactorily dealt with on motion.

Mr. Cozens Hardy, Q.C., appeared for the plaintiffs; Mr. F. Moulton, Q.C., for the defendant.

SEQUAH'S REMEDIES.

ON Monday, Mr. Willis Bund, in continuation of his application last week, applied to Mr. Justice Kekewich to restrain Alfred Bailey from palming off, in his peregrinations throughout the country, bottles of mixture representing that they are those of Sequah (Limited), in whose employ he formerly was. They could not, the learned counsel supposed, prevent him from saying he was formerly in the employ of the plaintiffs, or from extracting teeth gratis, as plaintiffs did; but they desired to stop his taking unfair advantage of his former connection with them, besides advertising himself as "Sequah" and selling bottles made up similar to the plaintiffs' productions, which were protected by trade-marks; but plaintiffs did not now proceed for infringement of trade-mark.

For the defendant, Mr. Cripps read affidavits to the effect that before he became connected with Sequah he travelled with waggons and the like and lectured on his remedies. One of the plaintiffs called on him and offered him 10*l.* a week to join them, adding that they did not wish to oppose him, but they were willing to spend 2,000*l.* in putting him down. Eventually he joined them, they finding the goods and he the waggons, &c., and travelling for them as "Sequah." He gained a great reputation in Spain, the West Indies, &c., he receiving 50 per cent. on the goods sold. He admitted having left the plaintiff company's employ, they having broken their agreement with him; but he had travelled as "Sandow ex Sequah," and had explained to his audiences the reason for this. He denied plaintiffs' exclusive right in the manufacture either of their "Oil" or "Prairie Flower," and said he had not infringed their trade-mark, and since their withdrawal of open-air lecturers plaintiffs' business had almost entirely collapsed. Other affidavits were put in corroborating the defendant's story.

In the result his Lordship, saying that he could not approve of the plaintiffs' sending different Sequahs about the country, as though they represented a certain person, thought defendant would do well to consider between now and the trial of the action whether he was not going a little beyond what was fair. But he did not think a sufficient case had, at the moment, been made out for him to interfere. There would be no order on the motion, except costs to be costs in the action.

THE ELECTROPATHIC BELTS AGAIN.

IN the High Court on Tuesday, before the Lord Chief Justice and a special jury, the case of Alabaster and others v. the Medical Battery Company (Limited) came on for hearing. In this action, the plaintiffs, Messrs. Alabaster, Gatehouse and Kempe, proprietors of the *Electrical Review*, sought to recover damages for a libel published in a circular by the defendants. They further claimed an injunction restraining them. The defendants pleaded privilege. Mr. Finlay, Q.C., Mr. Lawson Walton, Q.C., and Mr. Bankes were counsel for the plaintiffs; and the defendants were represented by Sir Edward Clarke, Q.C., M.P., and Mr. Germaine.

Mr. Finlay, in opening the case, said the defendant company substantially belonged to Mr. Harness, who had carried on for some time a very large business in the sale of electropathic belts, which were recommended as a cure for almost every ill to which humanity was subject. The libel complained of was in a circular sent out by the solicitor to the Medical Battery Company, which was as follows:—

39 Hatton Garden, London, E.C.,

September 16, 1892.

SIR,—Having been consulted by my clients, the Medical Battery Company (Limited), the proprietors of Harness's electropathic belts, and also the Electropathic and Zander Institute, of 52 Oxford Street, W., with reference to some malicious libels published in the *Electrical Review* and a paper called *Science Shiftings*, I beg to give you notice that if these or any further publications containing defamatory articles or paragraphs are sold or circulated by your firm my clients will hold you responsible.

In the same way you will be held responsible for the exhibition of any libellous bills or placards.

I am, Sir, yours obediently,

AUGS. FLEET.

The defendants had pleaded privilege, saying the circular was sent out in self-protection. That plea, he maintained, was absolutely false. When the jury knew the facts they would be in a position to judge how far the defendants were speaking the truth when they said the articles were malicious libels, and whether the defendants were not endeavouring, by means of threats to newsagents, to suppress criticism upon a system which had been carried on with great profit to Mr. Harness, and which eminently deserved the attention of the public. The patient who bought a belt from the Medical Battery Company, was told that if he wore it, currents of electricity would be generated, would pass through his body, and would cure him of a long list of diseases. The matter was brought prominently before the attention of the defendants by an action which was tried on July 19, last year, at Bloomsbury County Court. A Mr. Jeffery was persuaded to buy an electropathic belt for 5 guineas; but he could only pay down 2*l.*, and it was to recover the balance of 3*l.* 5*s.* that the action was brought in the county court. Mr. Gatehouse, who was a distinguished electrician, was a witness for the defence. The case resulted in judgment for the defendant, on the ground that the belt was absolutely worthless, and the Medical Battery Company were directed to return the 2*l.* the poor fellow had been induced to pay on account. On July 22, an article appeared in the *Electrical Review*, stating that the action had been the means of exposing one of the grossest cases of misrepresentation of the present day. The belts were declared to be worthless, and the idea that a debilitated body could generate electricity for alleviating its own suffering was most preposterous. The practices carried on at the Oxford Street mansion were condemned, and it was urged that the matter demanded the immediate attention of the Public Prosecutor. The rupture-specialist, observed Mr. Finlay, was, at an earlier period in his career, a furniture-salesman. Further articles against the Medical Battery Company appeared in the paper on August 19 and September 16. Evidence would be given as to the inefficiency of the belts sold.

Mr. Germaine submitted that any question as to the efficiency, utility, or uselessness of the belts was not in issue in the case. An action was pending in which the question of the efficacy of the belts was gone into fully.

The Lord Chief Justice observed that possibly this case might save all that. (Laughter.)

Mr. Finlay, proceeding, said the defendants sent round the circular by hundreds to newsagents with the result that the plaintiffs were inundated with applications for indemnities

relieving the newsagents from responsibility if they continued to sell the journal. The writ for the present action was immediately issued. It was with persons suffering from nervous disorders that founders of electropathic systems found a ready market. There were, however, diseases which no honest man could say received benefit from the use of an electropathic belt. Belts had been sold to patients whose ailments were of such a character as to make it physically impossible for a belt to do them good. There was rupture, disease of the spinal cord, and weakness of the heart. A lady who had disease of the spine paid 100*l.* for advice, shocks, and electric pills. (Laughter.) Then there were corsets, described as being magnetic in their properties. Mr. Harness had issued a book on "The Medical Uses of Electricity," in which he said his electropathic system directed mild currents of electricity centrally to the body in a convenient and agreeable manner. Anybody, however, with the most elementary knowledge of electricity could not suppose electricity could be generated in the body. There would be an excessively feeble current of electricity when the zinc and copper discs were connected externally; but belts had been sold by the Medical Battery Company without any connection, so that it was absolutely impossible there should be any current of electricity. More electricity could be got from a pin and needle dipped in ink than out of one of the electric belts even if properly connected. The defendants, in issuing the circular, were not actuated by honest self-defence. They sought to stifle what they must have known or suspected to be well-deserved criticism by endeavouring to stigmatise that criticism as a malicious libel.

A number of newsagents were called to prove having received the circular, and thereupon they refused to sell the newspaper until an indemnity was given by the managers of the *Electrical Review*. It was proved that the *Review* had inserted the circular in their journal, and one witness said the sale of the paper had increased rather than diminished.

Mr. Bankes said it could not be shown that the circulation had decreased, but the paper, which was being brought into prominence, was prevented having a larger sale by reason of the circular.

Mr. Francis Reeves, an electrician of Queen Victoria Street, stated that he was acquainted with Mr. Harness, who told him about sending out 500 circulars to newsagents. Mr. Harness was very angry when the articles appeared in the *Electrical Review*. He threatened all sorts of penalties, and said he would drive the managers of the paper to the workhouse.

Sir Edward Clarke raised exception to witnesses being called to give evidence as to the utility of the belts. Such evidence, he held, was not admissible on the issues. The law laid down that newsagents must be given some indication of the danger they were in by selling papers which contained libels. It was in order to give these agents notice that the circular was sent out.

The Lord Chief Justice said if they were going to bring an action against A that was no reason why they should give notice to B.

Sir E. Clarke: There might be actions against B as well.

The Lord Chief Justice said it was clear the defendants imputed that the plaintiffs wrote the articles not in the interests of science, but to crush a rival. The invention might be the most valuable thing in the world, but the plaintiffs had a right to exercise their judgment in saying that the belts were useless. If there was privilege he would put it to the jury whether the privilege had been exceeded, and whether the terms of the libel implied malice.

Sir E. Clarke persisted that the efficacy of the appliances should not be gone into. The whole matter would be raised in a trial which was coming on. His clients had not come prepared in regard to the matters opened by his learned friend. They would be prepared when the issue was legitimately raised. He applied that the case should stand over or be consolidated with the action. His clients would submit to any terms as regards costs that his Lordship might make.

Mr. Finlay objected to any postponement, and

The Lord Chief Justice said evidence was admissible which raised the issue as to the *bona-fides* of the plaintiffs in writing the articles published in the *Electrical Review*. The plaintiffs said their object was to expose a scientific humbug. On the other side it was said the articles were printed for

the purpose of injuring the company. The facts on these points were material, and he could not help admitting them. He had no right to adjourn the case. The defendants should have been prepared.

Sir E. Clarke: Then I am instructed to say we are not prepared to deal with the points indicated. Therefore I shall take no part in any controversy if witnesses are called. We are prepared to admit the libel and that damages must be paid. The jury will be left to fix the damages on the question relevant to that issue.

Mr. Finlay said that was a termination of the case which he should think very few of those behind the scenes had not expected. Up to that moment the defendants had shown a bold front. They knew their attack upon the personal character and honour of the plaintiffs was not made *bona-fide*. The circular was sent round because Mr. Harness resented the criticisms which appeared about his Institute and the way business was carried on there. He resented the exposure of his system by characterising the articles in the *Electrical Review* as malicious libels. Mr. Harness knew perfectly well what he had to meet. He could not fail to have known. Mr. Harness was not prepared because he never would be prepared to face the issue. (Applause in court.)

The Lord Chief Justice: Stop, stop! If that is repeated I will have the court instantly cleared. I object to the court being turned into a place where the counsel are cheered and counter-cheered. I will have none of it.

Mr. Finlay (proceeding) maintained that Mr. Harness had shirked the issue. The articles had been inserted in the *Electrical Review* for the purpose of exposing an extensive system of imposture. They wanted to open the eyes of the public suffering from nervous diseases, so that they should not be preyed upon by men like Mr. Harness, whom he would not characterise by a simple and expressive epithet, but which would be most appropriate. The public had been gulled. Mr. Harness fought the case until they came to the question whether the Institute was a real institute, and whether the electropathic belts did any good to any human being. Let the jury mark their sense of conduct so unworthy in any man who ventured to describe himself as belonging to the honourable profession of medicine. Medical electrician, forsooth! Such a man should for ever blush for having endeavoured to associate himself with so honourable a profession as that of healing.

Sir E. Clarke urged that the jury must not take it that his friend's case had been established by evidence. It had not. There was another case pending, and brought by the Medical Battery Company against the *Electrical Review*. Then would be the proper time to go into the question of the belts being effective or non-effective. The question in the present case was whether the circular sent out was privileged, whether the sale of the paper had diminished, and whether the reputation of the plaintiffs had been injured. The plaintiffs had not suffered at all. The circulation of the paper had not diminished. The plaintiffs, however, wanted damages on the ground that defendants had said that malicious libels had been published in the *Electrical Review*. These articles were, no doubt, violent attacks upon the Medical Battery Company and all connected with it. The writer did not content himself with saying the belts were of no real use or with saying there had been exaggerations in the representations, but that there was actually fraud in the conduct of the business. It was natural the manager and those persons associated with the Medical Battery Company should say this was very strong language, and that the articles were malicious libels. The object of the defendants in sending out the circular was to relieve the newsvendors from liability. The parties knew that the controversy must end in a court of law. There was no shirking on the part of the defendants in this action. Mr. Harness would go into the whole matter, but at the proper time. If there had been any damage the amount awarded should be nominal. He would remind the jury that the action in the first place was not one for damages. It was to obtain an injunction restraining the defendants from continuing to publish circulars. The plaintiffs would be entitled to their injunction and the costs of the proceedings.

The Lord Chief Justice delayed his summing-up till the following morning. He said the action was a simple one as far as the facts and the law went, although it was one

somewhat out of the ordinary way. Mr. Alabaster and Mr. Gatehouse were persons, it appeared, of real ability and eminence in their profession as electricians. Mr. Harness, who was at the head of the defendant company, had taken up the sale of electropathic belts and electric pills, which, he supposed, was a new form of electricity. (Laughter.) He failed to see how electricity could be taken internally in the form of a pill. Undoubtedly Mr. Harness drove a considerable trade. The plaintiffs were of opinion that that trade was an imposture—that it was all nonsense, and an imposition upon a too credulous public. Accordingly they had denounced in no measured terms the absurdities, as they thought, of these belts and pills and other things. Of course, however, the Medical Battery Company had a perfect right to retort in the same way. They had a right to say that their belts were scientific appliances, and that they were honourable, straightforward, and honest men. They could use strong language, and no one would complain. But defendants had written a letter to a number of newsagents, which was a very ingenious form of preventing the dissemination of these stinging articles in the *Electrical Review*. Did the circular impute to the plaintiffs dishonest and malicious conduct? The libel had been admitted, and in the absence of any justification the jury had to decide what damages should be awarded. No blame could be attached to Sir Edward Clarke for not going into the question of the efficacy of the belts. The matter was not included in his brief, and he could not argue or call witnesses upon it. The plaintiffs, however, had been accused of a very dishonourable thing. The plaintiffs said they were anxious science should be properly understood, and that these belts were not scientific at all, but mere quackery. This being so, the question of the efficacy of the belts was perfectly relevant. He could not help thinking that the defendants must have known they would be challenged upon the real subject-matter, for Mr. Finlay had accused them in round terms of gross imposture. Could an electric belt have any effect in curing rupture? People suffering from nervous diseases, not receiving a remedy from their ordinary medical men, were predisposed to try anything which would give them relief. A newsagent could not be held responsible for a libel which might be in a journal which he innocently sold. It had been held, however, that he would be responsible after being warned. The defendants, therefore, had somewhat ingeniously sent out the circular, which was the ground of complaint, saying the *Electrical Review* contained malicious libels, and if the news-vendors sold the paper they would be held responsible. Did the jury accept the explanation of the defendants as to the *bona-fides* of the circular, and that the articles were written for the purpose of ruining the Institute? Or did they believe the articles were written to expose an imposture? Sir E. Clarke had shrunk from the inquiry. The libel had been admitted, and it was for the jury to say what damages should be given.

Mr. Germaine observed that there was no evidence as to electric pills. They were created out of Mr. Finlay's fertile imagination.

The jury, after considering for a short time, gave a verdict for the plaintiffs, awarding the damages at 1,000*l*. The announcement was received with loud applause.

The Lord Chief Justice indignantly called for silence. Anyone who applauded again, he said, would spend that day and the next in prison.

Judgment was then entered for the plaintiffs, with costs.

Mr. Germaine asked for a stay of execution for fourteen days, so that there might be an appeal.

The Lord Chief Justice declined to stay execution, though he said he had no power to prevent an appeal.

In the Court of Appeal on Thursday application was made to serve short notice of motion in this case for Friday. Mr.cott, who appeared for the Medical Battery Company, said that within an hour of the verdict the solicitors of the plaintiffs demanded and were paid the 1,000*l*. damages.

The Master of the Rolls decided that ordinary notice must be given.

SODA-WATER SINE SODA.

At Brentford Police Court, on March 4, George Viney, of thiswick, mineral-water manufacturer, was summoned by

Mr. W. Tyler, inspector, for having sold soda-water which contained no bicarbonate of soda, and was simply carbonated-water, and contained a minute quantity of lead. Mr. James Joiner, landlord of the Red Lion public-house, Hounslow, was similarly summoned. Mr. Ricketts appeared for Viney, and Mr. C. Robinson for Joiner. The cases were heard together.

The Inspector said on February 8 he saw one of Viney's carts standing in the Market Place, Brentford, and the man in charge was delivering some boxes of mineral-water to the White Horse Inn. He demanded a large bottle of soda-water from the man, who replied at first that he did not sell retail, but afterwards handed witness a bottle, for which 3*d*. was paid. Its contents were divided into three parts, one of which was sent to the public analyst, who certified that the sample contained no bicarbonate of soda, but was simply carbonated-water, and contained a small quantity of lead. On the same day Joiner's premises were visited, and a large bottle of soda-water obtained for 3*d*. It was divided into three parts, and one of these was sent to the analyst, whose certificate was identical with that in the other case.

By Mr. Ricketts: When he asked for soda-water he expected to get it. He expected to get a food called soda-water, and expected it would contain some grains of soda. He expected that, to a certain extent, it would meet the requirements of the British Pharmacopœia—but he could not say to what extent. He knew that a pint of soda-water should contain 30 grains of bicarbonate of soda, and a 10-oz. bottle 15 grains. He would call that a food, and not a medicine.

The Chairman: I do not see what the British Pharmacopœia has to do with the matter. He asked for soda-water, and did not get it.

Mr. Ricketts said that he would show presently how the Pharmacopœia applied.

Witness, further cross-examined, said he held that there should be bicarbonate of soda used, but he knew of no legal standard as to how much should be used. He was unaware of any Act which required that the beverage soda-water should contain bicarbonate of soda. He should expect to find soda in it; he had lately read the correspondence in the *Morning Advertiser*, which convinced him of that idea. He understood that Viney used tin pipes on his premises. The law required that a lead service-pipe should be used, and the analyst had told him that water passing through such pipes must be impregnated.

By Mr. Robinson: He could not withdraw the allegation as to the lead; but the summonses would not have been issued on that ground alone. He did not know what kind of soda he expected to find.

Mr. Ricketts objected to the analyst's certificate as not being in accordance with the schedule to section 18 of the Food and Drugs Act. The certificate said that the sample "contained a minute quantity of lead." The percentage should have been given. It had been laid down that all water passing through lead-pipes must become impregnated, and it should have been stated if the lead in the sample was in excess of the amount reasonably allowed for by medical authorities for impregnation.

The Chairman: He did not ask for lead-water but soda-water.

Mr. Ricketts: It is a material point of this charge that the sample is contaminated with lead, and I ask to be allowed the fullest opportunity to show that the defendant, Viney, has not put in his soda-water something which is detrimental to health, in fact, poisonous.

The Bench overruled the objection.

Mr. Ricketts further contended that the requirements of the British Pharmacopœia did not apply to soda-water used as a beverage, but as a medicine. What the public wanted was a beverage, and not a medicine, which, if drunk to the extent soda-water was, would soon ruin a man's constitution.

The Chairman pointed out that a man should not sell an article of food not of the nature and substance demanded.

Mr. Ricketts: But what was the nature of the article demanded?—There is no definition laid down by law.

The Chairman: If you go on arguing till 12 o'clock to-night it will not alter our opinion. We do not think there was any fraud on the part of the defendant Viney.

Mr. Ricketts said he had had the sample analysed, and it

was found that the impregnation by lead was to the extent of 1/10th part of a grain.

The Chairman: That is struck out.

The Bench convicted both defendants and fined them 10s. each and costs.

THE ROYAL COLLEGE OF PHYSICIANS AS A LICENSING BODY.

IN the Queen's Bench Division of the High Court of Justice, on Wednesday, Lord Justice Smith gave his decision in the action raised by the Royal College of Physicians against the General Medical Council. The plaintiffs had granted to a licentiate a diploma to practise physic, including surgery, and the defendants, whilst admitting that the plaintiffs were entitled to grant certificates to practise physic, denied that they had any authority to license to practise surgery. Acting upon this, they declined to register a licentiate of the plaintiffs as being entitled to practise surgery. The plaintiffs thereupon brought the present action, asking for a declaration by the Court that from and after the passing of the Medical Act of 1836 the plaintiffs were a body duly qualified to grant the diploma in question. In giving his decision, Lord Justice Smith, after going through the various charters and statutes affecting the College of Physicians and the Company of Barber Surgeons, came to the conclusion that the plaintiffs were, when the Medical Act of 1836 passed, a medical corporation duly qualified to grant diplomas to practise physic and surgery. This being so, the plaintiffs were entitled to judgment, to a declaration that they were so duly qualified, and to the costs of the action.

Bankruptcy Reports.

R. JOHN LEE DENNIS, late of Foreman's Buildings, Sherwood Street, now residing at 6 Shakespeare Villas, Nottingham, late Wholesale Chemist.

THIS bankrupt was publicly examined on Friday last, at the Nottingham Bankruptcy Court, before Mr. Registrar Steel. Mr. Green, who appeared on debtor's behalf, said his client's present unfortunate position had been caused solely through an action brought against him for an infringement of a trade-mark respecting pig-powders. It was a very small matter altogether, and was really a question of whether he was entitled to use a black pig for a trade-mark or not. It had apparently been done innocently. After the debtor had been served with a writ in respect to the matter he (Mr. Green) advised him to endeavour to come to terms with the other side, but, owing to the position they took up, he could not advise his client to arrange with them in the manner they indicated. The debtor had made an error in the answers to the printed questions on the file. He had told the Official Receiver that the terms of settlement were that he should pay 100% damages and 40% costs, but that was not the case, although he was not far out. The actual figures were 25% instead of 100% damages, and 90% for costs as between solicitor and client, instead of 40%. When they tried to come to an arrangement, the plaintiffs asked them to give up more rights than they had asked for on the writ itself; therefore debtor decided to let the matter go into Court. The Official Receiver said it could not be alleged that the defence was frivolous or vexatious.

The debtor, in examination, repeated the details of his business career, such as were published last week, and was allowed to pass his examination.

SOLUBLE COCOA.—With the object of rendering cocoa preparations rich in "soluble constituents" it is a common practice with some manufacturers to add potassium, sodium, or ammonium carbonate to the ground cocoa. Stutzer has investigated the matter, and finds that the increase in the proportion of soluble constituents, both organic and inorganic, bears no ratio to the quantity of alkali added, and consequently that nothing is to be gained by their addition.

DEATHS.

BERRY.—On February 9, Thomas Berry, chemist and druggist, Oldham. Aged 69.

DOUGLASS.—On February 23, Richard Douglass, chemist and druggist, Coventry. Aged 78.

FOSTER.—On March 4, at Loraine Place, Holloway, Frederick Foster, late Major and Hon. Lieut.-Colonel of the 21st (Finsbury) Middlesex Rifle Volunteers, also of Niagara Works, Eagle Wharf Road, N., in his 53rd year. Mr. Foster, whose death is recorded in the notification we have just quoted, was a man of much more than usual ability and energy. He was possessed of great mechanical skill, which enabled him to assist in a considerable degree in the development of the mineral-water industry. Mr. Foster had been apprenticed to the engineering trade, and was in his early life engaged in the railway-engineering works of Messrs. Stevens, of Southwark. Just about a quarter of a century ago he married the daughter of the late Mr. Samson Barnett, of Hoxton, and soon after became associated with him in the business. Mr. Barnett had established a considerable business as a manufacturer of aerated-water machinery as well as of diving-apparatus. But the demand for the former class of goods, at any rate, was a rapidly growing one and Messrs. Barnett & Foster met it in the most spirited manner. Inventions and improvements followed each other rapidly in their factory, and the growth of their works was phenomenal. An enormous impetus was given to their business by the association of Mr. Foster with the late Mr. Hiram Codd in the perfection and introduction of the well-known patent bottles. Messrs. Barnett & Foster were for many years the sole agents for those bottles, and new machinery had to be invented to suit the bottles. The manufacture of siphon



was also introduced into the Niagara Works. Mr. Foster was, besides, the co-inventor with Mr. Fleuss of the oxygen-lamp, which was generally used in diving and mining until it in turn became displaced by electricity. In the midst of his business occupations Mr. Foster found time to take an active share in "volunteering." He was for many years an officer in a crack regiment, and held the commission of major when he retired some two years ago, and was then gazetted to an honorary lieutenant-colonelcy. It was only a few weeks since that the Victoria decoration for long service was awarded him.

Mr. Foster was for a number of years regularly to be found at the head of a large staff at the Mineral-water Trade Exhibitions. His popularity in the trade was well evidenced on those occasions. He was apparently as active as ever at the 1891 exhibition, but he was then suffering from the disease from which he was unhappily never to recover. Shortly afterwards he underwent a painful operation, and then spent some time at Hastings. He returned to London a year or so ago, but has never been able to occupy himself to any extent in business since, though he continued to take

a great interest in all that was proceeding. He was much loved by those who knew him intimately, and everyone who came in contact with him in business appreciated the attractiveness of his manner and his scrupulous integrity. A large number of business and other associates paid a last tribute of respect to him at the funeral at Abney Park Cemetery on Wednesday last. Mr. Foster has left a widow and four daughters.

HALL.—On February 16, Samuel Hall, chemist and druggist, Liverpool. Aged 52.

JONES.—On February 21, C. W. Jones, chemist and druggist, Ashby-de-la-Zouch. Aged 41.

POWELL.—At 3 Bright Crescent, Mayfield, Edinburgh, on March 3, Frederick William Powell, late of Duncan, Flockhart, Powell & Co., Leith, in his 81st year. For close on forty years Mr. Powell was engaged in business as a chemist at Leith, and during a portion of that time was a partner of the firm mentioned. He retired some eighteen years ago, and latterly took a great interest in art, his collection of paintings and articles of *virtu* being a fine one. Mr. Powell was originally an assistant in the North Bridge establishment of the well-known Edinburgh firm of Duncan, Flockhart & Co. When they began business in Leith, fifty-two years ago, he was admitted as a partner in it, and his name became associated with that of the firm, the designation of the co-partnership being Duncan, Flockhart & Powell. He had charge of the business from that time onward until he retired, sixteen years ago. Mr. Powell never displayed much interest in pharmaceutical matters, his energy and attention having been mainly concentrated upon his business.

PRANTL.—Professor Prantl, one of the most prominent botanists of this generation, and the author of more than one standard work on the science to which he devoted his life, died suddenly on February 24 at Breslau, where he was professor at the University and director of the Botanical Gardens. Dr. Potonié, an old friend of Prantl, writes as follows, in the *Pharmaceutische Zeitung*, about the career of his deceased fellow-scientist:—Karl Prantl was born in Munich (where his father was engaged as a teacher at the University) on September 10, 1849. He passed through the University of his native city, and in 1873 established himself at Würzburg, where his views on science were largely influenced by the botanist Julius Sachs. This influence Prantl expressly acknowledges in his "Handbook of Botany," the title-page of which bears the announcement that it has been "composed upon the basis of J. Sachs's 'Handbook of Botany.'" When Prantl published this great work, which practically revolutionised the teaching of botany, he was only 25. In Germany Prantl's "Botany" has run through eight editions, the last of which appeared in 1891, and the book has been translated into several foreign languages. Towards the end of 1876 Prantl was called to the chair of botany at the Academy of Forestry, at Aschaffenburg, and in 1891 he accepted his last appointment at Breslau. Prantl's first published work—on inulin—appeared in 1870. Then followed his "Botany" in 1874, and in the following year the first part of his "Researches in the Morphology of the Cell-cryptogams," treating of the *Hymenophyllaceae*. The second part, published in 1881, was devoted to the *Schizaeaceae*, but no further parts of the work have appeared. In 1884 Prantl published "Excursion-flora of the Bavarian Kingdom," and in 1887 appeared the first part of Engler and Prantl's "Natural Families of Plants"—an immense illustrated work, in the production of which Prantl co-operated with Professor Engler, his predecessor at Breslau, and now a University professor in Berlin, the former taking the editorship of the Cryptogams, the latter of the Phanerogams. Up to the present time seventy-nine parts of this book have appeared, but unfortunately these only include five parts of Prantl's share in the work. Prantl was a thorough believer in the theory of evolution, and in his investigations of the relationship of plants his first care was always to trace the genesis of the specimen under observation to its uttermost point in the living flora.

SPEAKMAN.—On March 3, Mr. Isaac Speakman, chemist and oil merchant, 27 Bridge Street, Runcorn. Aged 43 years.

WRIGLEY.—On February 20, Charles Wrigley, chemist and druggist, Rochdale. Aged 70.

TRADE-MARKS APPLIED FOR.

ANY person who has good grounds of objection to the registration of any of the following marks should at once communicate with Sir Reader Luck, Comptroller-General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

(From the "Trade Marks Journal," March 1, 1893.)

"LAW'S PELLETS," and sketch map of Cyprus; for pills By J. T. Law, Hart Street East, Southport. The essential particular is the device. 168,898.

"BULLDOG," and sketch of dog with bull's head; for chemical substances used in medicine and pharmacy. By J. E. J. Bonn, High Street, Brading, Isle of Wight. 169,224.

"PEDIPAX," signature, and wording on label; for a curative preparation for the feet. By R. A. F. Atkinson, Cedar Lodge, Taplow. The essential particular is the facsimile signature. 169,414.

"DULCIN," and signature; for sweetening compound. By J. D. Riedel, 12, 13 Gericht Strasse, Berlin. The essential particular is the copy signature. 169,429.

"CHARLES RICHARDS," as signature; for chemical substances used in medicine and pharmacy. By C. Richards, 51 Forest Lane, Stratford, Essex. 169,913.

"OPOSSUM," for medicine. By H. Collard, 26 Leadenhall Street, London. 170,013.

Device of horse-shoe; for stearine and candle glycerine. By De R. Oedenkoven & Co., Rue des Seigneurs, Antwerp. 168,910.

Mermaid and medallion device on label and signature, &c.; for aerated beverages. By T. Byrne, trading as Byrne, Son, & Co., 18 Lower Kevin Street, Dublin. The essential particulars are the mermaid device, medallion, the word mermaid, and signature. 167,073.

"AQUARIUS," with a circular device on black label, and wording; for aerated water. By MacGregor, Coldbeck & Co., 101 Leadenhall Street, E.C. 167,784.

"EAU Á BRÛLER," and wording on label; for a perfume. By E. B. Kendall, trading as Holden & Kendall, 30 Pavement, York. 169,773.

(From the "Trade Marks Journal," March 8, 1893.)

"EPIDERMICA," and signature; for chemical substances used in medicine and pharmacy. By Gwynne & Co., 41A St. George's Place, Knightsbridge, S.W. The essential particular is the signature. 166,775.

"EL PONOLE PILLS"; for pills for human use. By W. Payton, 83 Anne Street, Burnley. The essential particular is the word "Ponole." 168,339.

"COUGH-BOTTLE," device of scimitar, sun-face, and chest, and wording; for cough mixtures. By Jesse Williams & Co., Park Hall Buildings, Cardiff. The essential particular is the combination of devices. 169,308.

"HASHRA TEA," and device of girl holding tea-pot and cup, and tea-urn and wording; for a medicinal preparation. By The Hashra Tea Company, 66 New Stone Buildings, Chancery Lane, London. The essential particulars are the word "Hashra" and the device. 170,230.

"PARADOX"; for drugs and medicines, &c. By W. T. Thorp, trading as Thorp & Co., Norfolk Square, Glossop. 170,393.

"SILWOF"; for mineral and aerated waters, &c. By W. Fowles, 61 Nicholson Street, Greenock. 170,487.

"THE QUENCHER," and device of fireman holding hose-pipe; for mineral and aerated waters. By J. Jeffrey, 50 Jopp's Lane, Aberdeen. The essential particular is the device. 170,488.

"ELFIN"; for toilet-soap. By Price's Patent Candle Company (Limited), 31 Threadneedle Street, London. 169,915.

Personalities.

MR. BATES, chemist, of Oxford Street, Southampton, has secured the contract for the supply of drugs to the Inman Line.

SIR GEORGE BUCHANAN, M.D., late chief medical officer to the Local Government Board, is to receive the honorary degree LL.D. from the Edinburgh University next month.

THE Senatus Academicus of St. Andrews University is to confer the honorary degree of LL.D. upon Professor H. E. Armstrong, F.R.S., President-elect of the Chemical Society.

LIEUT.-COL. J. G. F. RICHARDSON, of Leicester, is amongst those connected with pharmacy who have received the "Victoria decoration" for distinguished service as a volunteer officer.

WE have reason to believe, says the *Times* in a four-line editorial, that Lord Salisbury has accepted the Presidency of the British Association for the year 1894, when the meeting will be held at Oxford.

AT the usual fortnightly meeting of the St. Luke's Vestry, held on Tuesday, Mr. George Eade, chemist, 72 Goswell Road, was unanimously elected to the position of governor of the Central Foundation Schools, Spital Square, Bishopsgate, *vice* Mr. G. R. Peerless, resigned.

MR. JAMES MACKENZIE, says the *Scottish Leader*, is a well-known chemist, antiquarian, and Parochial Board man in Edinburgh. With a decided air engendered of long business habits, and a smart manner of expressing himself caught up by disputations at committee and board meetings, he is the terror of the city parochial officials. He looks after the poor-houses as if it were his own domicile, pays surprise visits, tastes soup, looks at the floors to see that they are properly washed, and is altogether too active for the comfort of the overseers. At the board he carries the same method into public business. He wants explanations on all matters, questions the heads of committees as if they were negligent shop-assistants, and, in short, looks after the ratepayers' interests as if they were his own. As an antiquarian he is especially devoted to Burns and all relics of the poet. The Burns' MSS. question also affected him, but has not been settled yet. In the Society of Antiquaries of Scotland he reads papers frequently, and generally on his own hobby of Burns. Mr. Mackenzie looks as if he had turned his sixties. His frame is large and firm set, but not bulky. A great stickler for form, he imparts this characteristic into conversation at every turn. Should a friend mention the Sunday, Mr. Mackenzie comes down on him at once. "What is the Fourth Commandment?" he sharply asks. "Remember the Sabbath day." "Then, why do you call it Sunday?" is the immediate rejoinder. In his business he is as thorough as in parochial matters, and could make up his prescriptions blindfolded without a mistake.

CUSTOMER—I should like to try a bottle of Mother —'s syrup. Do you know anything about it, Mr. Brown? Mr. Brown: Yes, ma'am; it is two and sixpence a bottle!

The doses of all pilula and extracta are from gr. v. to gr. x., except pilula ferri iodidi, hydrargyri, plumbi cum opio, phosphori and saponis composita, and extractum, acniti, belladonnae, colchici, colchici acetici, cannabis indicæ, and stramonii—the dose of these is from gr. $\frac{1}{4}$ to gr. j.; aloes socotrina (gr. j. to gr. ii.) and physostigma (from gr. $\frac{1}{16}$ to gr. $\frac{1}{4}$).

THE SULPHATE-OF-AMMONIA MARKET.—There has recently been a considerable advance in the price of sulphate of ammonia, mainly, it is believed, in consequence of the action of the nitrate syndicate in restricting the shipments of nitrate of soda from Chili. The makers of sulphate of ammonia are the mineral-oil companies, the blast-iron furnaces, and gas companies. Nearly all the Scotch ironworks are now fitted with plant for recovering the ammonia, which used to be allowed to go to waste into the air with the smoke of the furnaces. To the ironmasters and also to the oil companies, the advance in ammonia is most welcome in these dull times.

Trade Notes.

MESSRS. BURROUGHS, WELLCOME & Co. have been advised of two awards at the Monaco Exhibition—namely, the Grand Diploma of Honour for pharmaceutical products, and the Gold Medal for "tabloids."

THE contract for supplying the British navy with drugs, medicinal preparations, &c., for the next three years, has been secured by Messrs. John Richardson & Co., Leicester (Limited). This is the first occasion on which the contract has been given to a provincial house.

THE ordinary general meeting of the shareholders of Spratt's Patent, America (Limited), was held on Wednesday, at the City Terminus Hotel. For the first time the trading account showed a profit. Last year there was a loss of 370*l.*, as against 300*l.* in the previous twelve months. The past eighteen months' trading, however—for the accounts were now made up to November 30 instead of May 31, as heretofore—showed a profit of 412*l.* The company had secured from the United States Government the contracts for benching and feeding the dog and poultry shows at the forthcoming World's Fair at Chicago.

THE last number of Helbing's *Pharmacological Record* is a report of an exhaustive examination of Burroughs, Wellcome & Co.'s tabloids. Mr. Helbing and Dr. F. W. Passmore have carefully tested, qualitatively and quantitatively, tabloids containing potassium bromide, calomel, arsenious acid, salicylate of soda, quinine bisulphate, iron and quinine citrate, antifebrin, antipyrin, morphia hydrochloride, and strychnia sulphate, and in every case they detail the process of analysis. The principal objects of the investigation were to ascertain—(1) The accuracy of the dosage in the tabloids; (2) the quality of the drugs; and (3) the solubility of the tabloids. The conclusions arrived at are in every case and in all respects satisfactory. Not only are the medicines employed found to be fully equal to Pharmacopœia standard, but it is shown that in such a case as that of calomel, for instance, no oxidation of the active agent has occurred.

WHAT NEWCASTLE CHEMISTS THINK.

ON the invitation of the local secretary of the Pharmaceutical Society, the members of the trade in Newcastle-on-Tyne and district met on Wednesday, March 8, to consider the recent judicial decision in the administration of the pharmacy laws. An apology for absence was read from Mr. N. H. Martin, who was in London.

On the motion of Mr. Weddell seconded by Mr. P. Hall, Mr. B. S. Proctor, F.R.C., was voted to the chair. There were also present Messrs. Hall, Stuart, Weddell, Duncan, Kerse Proctor, Park, Clague, Rose, Bennett, Cubey, Gale, Forster, Arrowsmith, Simpson John Proctor, Reid, Daker, Merson, Giles, Pescod, Chalmers, Spargo, and Richardson.

In opening the discussion, the Chairman reviewed the recent case of Pharmaceutical Society *v.* Piper & Co., and the recently-published book on "Pharmacy and Poison Law." He pointed out that the judgment of the Court of Queen's Bench decides that an unregistered person may not sell any article which is a poison according to the Pharmacy Act; that a compound which contains one or more of the scheduled poisons is a poison according to the Pharmacy Act. Also that secret preparations, whether bearing the medicine stamp or not, are not patent medicines according to law; that it left undecided that important question, What is a preparation of a poison? instancing chloroform in chlorodyne and in chloroform-water as cases illustrating a sensible and an absurd construction of the Act, and pointing out that "the common-sense" view as put forward as a guide by the Privy Council was the chemist's safety.

In the discussion which ensued some of the points previously raised were further dwelt upon by Messrs. Simpson and Weddell.

The question of a chemist prescribing and dispensing a medicine containing poison was raised by Mr. Pescod, and it

was felt that no risk as to illegal sale of poison was incurred when the prescription was duly copied.

The question of what is efficient supervision by a qualified employer was discussed at length.

Mr. Weddell urged the enlargement of the poison schedule, which was considered desirable by the meeting.

It was moved by Mr. Clague, and seconded by Mr. Park :—

That, in the opinion of this meeting, the recent decision of the Pharmaceutical Society *v.* Piper & Co. gives additional safety to the public, and congratulates the Pharmaceutical Society on the judgment obtained, and it recognises the fact that the Pharmaceutical Society is deserving of support.

This was carried *nem. con.*

Mr. Weddell moved, and Mr. Forster seconded, the following resolution :—

That this meeting respectfully petitions the Council of the Pharmaceutical Society of Great Britain to furnish it with any information obtainable regarding the sale of proprietary medicines in Ireland, with a view to ascertaining whether the absence of the medicine-stamp in that country affects the consumption of such medicines.

A vote of thanks to the Chairman brought the proceedings to a close.

New Companies.

G. & J. RAWSTORN (LIMITED).—Capital 40,000*l.*, in 10*l.* shares. Objects : To acquire the business now carried on at Hull under the style of G. & J. Rawstorn, and to carry on business as oil, turpentine, and resin merchants, &c. The first subscribers (who take one share each) are :—G. Rawstorn, 78 High Street, Hull, oil merchant ; J. Rawstorn, 78 High Street, oil merchant ; Harriet Rawstorn, wife of G. Rawstorn ; Jane U. Rawstorn, wife of J. Rawstorn ; Kate Rawstorn, Anlaby Road, Hull, spinster ; Sarah G. Rawstorn, Anlaby Road, Hull, spinster ; and J. Powell, 31 Osborne Street, Hull, merchant. There shall not be less than three nor more than seven directors, and the first are G. Rawstorn, J. Rawstorn, and J. Powell. Qualification, 100*l.* ; remuneration to be fixed in general meeting.

W. H. STUNT (LIMITED).—Capital 12,500*l.*, in 5*l.* shares. Objects : To carry on the business of manufacturing druggists, druggists' sundrymen, drysalter and dealers in patent medicines, and to acquire the business carried on by Octavius Stunt, under the style of W. H. Stunt & Co., at 45 Tabernacle Street, and 44 Southwark Bridge Road, London. The first subscribers (who take one share each) are :—Octavius Stunt, 45 Tabernacle Street, London, merchant ; H. H. Stunt, 80 Pelham Road, Wimbledon, merchant ; F. H. Organ, 138 Tewkesbury Road, N., printer ; W. Weston, 25 Danson Road, Newington, S.E., traveller ; E. C. Wyvill, 103 Cheap-side, E.C., secretary ; F. Jane Stunt, 80 Pelham Road, Wimbledon ; Theresa M. Wyvill, 159 Gladstone Road, Wimbledon. Registered without articles of association. Office : 45 Tabernacle Street, London.

MARSTON & CO. (LIMITED).—Capital 1,000*l.*, in 1*l.* shares. Objects : To carry on in Bournemouth and elsewhere the businesses of dentists, chemists, druggists, patent medicine manufacturers, mineral-water manufacturers, &c. The first subscribers (who take one share each) are :—J. Parkinson, 40 Old Christchurch Road, Bournemouth, chemist ; Emily Jones, 50 Holdenhurst Road, Bournemouth, spinster ; J. Marston, 52 Holdenhurst Road, dentist ; F. W. Smith, Castle Street, Ludlow, chemist and dentist ; J. Couse, 225 High Street, West Bromwich, baker ; A. E. Marston, 7 Tadmor Street, Shepherd's Bush, W., traveller ; C. Spencer, 4 The Ravenscroft, London, W., chemist. There shall not be less than two nor more than five directors, and the first are J. Parkinson, C. Spencer, and J. Marston. Qualification, 1*l.*

E. P. POTTER & CO. (LIMITED).—Capital 60,000*l.*, in 10*l.* shares, of which 1,500 are preference, and 4,500 ordinary. Objects : To acquire and take over as a going concern the trade or business of Edmund Peel Potter and William Henry Higgin, chemical manufacturers, carried on by them at the Hall Chemical Works, Little Lever, Lancashire, under the style of E. P. Potter & Co. ; and to carry on the business of

salt manufacturers, tar distillers, manufacturing chemists and druggists, &c. The first subscribers are :—E. P. Potter, Bolton, chemical manufacturer ; N. H. Higgin, Hopefield, Bolton ; Ellen A. Potter, Bolton ; Agnes Higgin, Bolton ; C. Mellor, 7 Rumford Street, Liverpool, merchant ; E. T. Crook, Netherfield, Bolton, cotton spinner ; J. Gladstone, Birmingham, wine merchant. Until otherwise determined by a general meeting, the number of directors is not to be less nor more than five ; the first being E. P. Potter and W. H. Higgin. Qualification, 1,000*l.* Remuneration to be determined by the company in general meeting. Registered office : Hall Chemical Works, Little Lever, Bolton, Lancashire.

WILLS OF DECEASED CHEMISTS.

The will of the late Mr. F. W. Kenrick, of Horncastle, who died on October 16, 1892, was proved at Lincoln on November 8, 1892, by the executors, Messrs. R. Searby, J. Gaunt, and R. H. Bell. The gross personalty amounted to 2,078*l.* 19*s.* 10*d.* Subject to small immediate legacies to his widow and children, the testator leaves his estate, real and personal, to his executors in trust for the benefit of his wife during widowhood—to whom he also leaves the use of the household furniture, silver, &c. Upon her death or remarriage the property is to be divided between the testator's children.

The will of the late Mr. John S. Ward, chemist, of Liverpool, who died on November 23, 1892, was proved at the District Probate Registry on December 8, 1892, by Mrs. Rebecca Ward, the deceased's widow and sole executrix. The gross personalty amounted to 903*l.* 3*s.* 7*d.*, and the net to 769*l.* 4*s.* The testator makes his widow his universal legatee and appoints her guardian of any infant children.

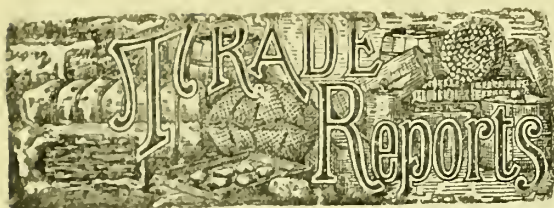
The will of the late Mr. F. G. Edgar, registered chemist and druggist, of Petworth, Sussex, who died on March 20, 1892, has been proved at the Chichester Registry of the Probate Division of the High Court of Justice by Mrs. Margaret Edgar, the deceased's widow and sole executrix, to whom the testator bequeaths and devises the whole of his estate, real and personal. The gross personalty amounted to 961*l.* 14*s.* 8*d.*

Letters of administration of the personal estate of the late Mr. S. W. Moody, chemist, of Louth, who died on December 8, 1892, were granted at Lincoln Probate Registry, on December 28, 1892, to Mrs. Sarah Moody, 114 Newmarket, Louth, the deceased's widow. The gross value of the personalty amounted to 393*l.*, and the net to 312*l.* 19*s.* 2*d.* ; there were no leaseholds.

The will of Mr. Thomas Buck, late of Brinkburn, Stamford Hill, who died on January 8, was proved on February 14, the value of the personal estate amounting to upwards of 125,000*l.* The testator bequeaths 1,000*l.* to the Asylum for Fatherless Children, Reedham ; 500*l.* each to the Warehousemen and Clerks' School, Caterham ; the Commercial Travellers' Society, Philpot Lane ; the Benevolent Fund of the Pharmaceutical Society of Great Britain ; and the Infant Orphan Asylum, Wanstead ; and legacies to executors and others. [Mr. Buck's large fortune was inherited from a brother, and was not in any way due to the drug-trade. He was formerly in business in Kingsland Road, at the shop now held by Mr. Ralph Hall.]

The will of the late Mr. Samuel Parr, of Nottingham, aerated-water manufacturer, and formerly pharmaceutical chemist, who died on October 14, 1892, was proved at Nottingham on January 27 last by Mrs. Parr, the widow, and by Messrs. George and Samuel Parr, the sons of the deceased. The gross value of the personalty amounted to 4,623*l.* 5*s.* 11*d.*, and the net to 4,109*l.* 10*s.* The testator leaves his furniture, plate, linen, &c., to his widow, and, subject to legacies of 500*l.* each to his two daughters, bequeaths and devises his estate to his widow and sons George and Samuel.

The will of the late Mr. J. J. Coulding, chemist and druggist, of Ardwick, who died on April 11, 1892, has been proved at Manchester Probate Registry by Mrs. Eliza Coulding, the deceased's widow and sole executrix. The personal estate amounted to 139*l.* 6*s.* The testator leaves all his property, real and personal, to his wife.



Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., March 9.

The Cinchona Auctions.

There will be no cinchona sales in London from March 21 to April 18.

Fracas at the Shellac Auctions.

During the course of the shellac auctions on Tuesday a dispute arose among two individuals in the audience on the question of making offers for certain parcels. The cause of the quarrel was trivial, but the party against whose offers objection had been made called his antagonist a blackguard, and was told that his head would be punched when he appeared outside. This threat was executed to the letter, in the public street, just outside the Commercial Sale-rooms. The punchee, we understand, subsequently ineffectually sought to obtain a summons against his puncher.

The Position of Cod-liver Oil.

Cod-liver oil has had a very heavy fall during the last few weeks, and non-congealing Norwegian oil has now almost reached the lowest figure on record, which has hitherto been 54s. per barrel. At this price three years ago some business was done, but this exceptional depression did not last long, and was followed by a sudden rebound. Moreover, it then occurred in the month of April or May, and after unusually favourable fishing in Finmarken. So far this season the fishing in Lofoden, which is still proceeding and will continue until Easter, has not been exceptionally successful, and there are already reports that the Norwegian holders do not care any longer to sell at the low prices which are now ruling. They are able, they say, to turn the oil into a suitable oil for mechanical purposes, which will sell at about 52s. 6d. per barrel, or about 9s. below the price of the best steam-refined oil, and this pays them quite as well, as there is a considerable saving both in the packing and in the avoidance of the refining process. Under these circumstances, and also considering the general rise which has recently occurred in fish-oils, some of the Norwegian agents here appear to think that there is good ground for hoping for a sudden rebound in the market.

The Board of Trade Returns.

The Board of Trade returns for February are again exceedingly unfavourable. Our total imports have declined in value (as compared with February, 1892) from 34,877,931l. to 29,758,748l., or by almost exactly one-seventh. The imports of chemicals have declined from 866,634l. to 754,160l., but oils show a slight increase, no doubt on account of the great advance in price in almost all kinds of fatty oils. The exports of our national produce have fallen from 19,323,753l. to 17,093,309l., or by nearly 12 per cent. The decline affects all departments, excepting, strangely enough, chemicals, in which there is a small increase—from 701,022l. to 735,736l. The same phenomenon occurred in January. Its explanation may probably be found in the increase of our shipments of alkali and of disinfectants. Re-exports of foreign and colonial merchandise are the only department in which trade is improving, though

the improvement last month, as compared with February, 1892, was almost infinitesimal. The figures were 5,733,252l. and 5,728,772l. respectively. It should be borne in mind that there was one working-day less in February of this year than in February, 1892.

ACID (CARBOLIC).—There is a movement this week towards higher prices, mainly as a consequence, it is reported, of large orders that have been received from the Continent. The makers' quotations for crystals 34° to 35° vary from 6½d. to 7¼d., and 39° to 40°, we believe, may be had in the second-hand at 7¼d.; liquid quality, 97 to 98 per cent., is held at 1s. 10d. to 2s. per gallon, but it is said to-day that prices are expected to be higher to-morrow.

ACID (CITRIC).—There are second-hand sellers of English brands at 1s. 5½d. to 1s. 5¾d.; makers ask 1s. 5¾d. per lb. for B.P. acid.

The exports of citric acid from London have been:—

		1889	1890	1891	1892	1893
In February ..	cwts.	157	409	472	854	446
Jan. 1-Feb. 28 ..	"	362	919	750	1,328	777

ACID (TARTARIC).—A fairly steady market, 11½d. per lb. appears to be the lowest figure in the second-hand, while the makers quote 11½d. to 12d. per lb.

ANISE.—The stock has become small, and somewhat higher prices are quoted. *Russian* seed is reported to have been dealt in at 23s. to 26s. per cwt. according to crop. Fine seed of the season 1892 is held for 26s. to 27s. per cwt.

ARSENIC.—Very scarce. A few manufacturers are said to have temporarily stopped making any for want of raw material. The others have arrived at some understanding to regulate the price. From 13s. 6d. to 13s. 9d. per cwt. must now be paid for best white powder, and lump is 21s. to 22s. per cwt.

BUCHU.—The arrival of 92 bales from Cape Town and Algoa Bay by the *Doune Castle* and the *Moor* does not augur well for the maintenance of the present quotations.

CALUMBA has been in somewhat better demand since the last auctions, and several sales at slightly improved prices are reported.

CAMPHOR (CRUDE).—The market is advancing. For Japan on the spot 170s. per cwt. is now asked, and for *China* 160s. is said to have been paid and afterwards refused, 162s. 6d. being now the lowest price. A bid of 150s. per cwt., c.i.f. terms, is said to have been refused for a parcel of Japan camphor. To-day's quotations are:—*Japan*, February shipment, 157s. 6d., c.i.f.; March-April shipment, 150s. c.i.f.; *China*, near at hand, 152s. 6d. c.i.f.

CAMPHOR (REFINED).—There is no alteration in the price of *English*, which is still 28s. per lb. net. But the Germans are mostly firmer in their views and say that there is very little to be had at 1s. 11d. per lb. net.

CANARY-SEED.—The market keeps steady, but without alteration in price. *Turkish* and *Morocco* seed are quoted at 80s. to 82s., *Spanish* 86s. to 90s., and *English* at 80s. per 464 lbs.

CANTHARIDES.—Chinese flies easier, at 2s. 10d. per lb., c.i.f. terms.

CARAWAY-SEED.—Prices keep steady with a firm tone, and sales of good seed of the last crop at 22s. to 24s. per cwt.

CARDAMOMS.—The exports from Ceylon from January 1 to February 13 have been:—1893, 46,998 lbs.; 1892, 42,975 lbs.; 1891, 39,671 lbs.; 1890, 62,021 lbs.

CHAMOMILES.—There has been no change in the price of Belgian chamomiles, but the market is generally tending higher.

CHLORATE OF POTASH.—A firm market, at 9½d. per lb. for March, 9d. for April, 8½d. for May, and 8¼d. for June delivery. Second half of the year offers at 8d. per lb.

CLOVES.—*Zanzibar* cloves are dull at easier prices. Only 320 bales were offered at auction, and about 120 sold at 4½d. to 4¼d. per lb. for dark to medium. Ordinary *Amboina* sold at 5½d., fine bright *Runion* at 5¾d., common unpicked to fine bold picked *Penang* at 6½d. to 10½d. per lb. For delivery.

about 4,000 bales Zanzibar cloves are reported to have been sold at $4\frac{5}{16}d.$ up to $4\frac{3}{4}d.$ per lb., according to position.

CINCHONA.—The fortnightly auctions held on Tuesday were unusually heavy, no less than 3,781 bales of bark being catalogued, of which, however, 118 bales were withdrawn. The remainder was composed as follows:—

	Packages	Packages	
Ceylon cinchona ..	773 of which	758 were sold	
East Indian cinchona ..	2,295 "	2,115 "	
Java cinchona ..	68 "	68 "	
South American cinchona ..	527 "	527 "	
	3,663	3,468	

The quantity actually offered fell considerably below what had been expected, as the manufacturers had received samples of over 5,000 bales. The assortment was a fairly good one, Indian barks, especially grey and yellow varieties, being very plentiful, considering the extent of the sales, and the fact that it is known that the next Amsterdam auctions will again be very large ones. Tuesday's sale was not altogether unfavourable. All the German works competed very well, and the average unit was scarcely quotably lower than that of the previous sale. It may be put at from $1\frac{1}{10}d.$ to $1d.$ per lb. The following are the approximate quantities purchased by the various buyers:—

	Lbs.
Agents for the Auerbach factory ..	198,972
" Brunswick factory ..	174,646
" Mannheim and Amsterdam works ..	121,347
" Frankfort o/M. and Stuttgart works ..	71,015
" Paris works ..	46,910
Messrs. Howards & Sons ..	34,620
Mr. Thos. Whiffen ..	15,520
Agents for the American and Italian works ..	2,000
Sundry druggists ..	78,312
Total quantity of bark sold ..	743,342
Bought in or withdrawn ..	81,710
Total quantity of bark catalogued ..	825,052

The auctions included 495 bales of Ceylon bark imported in 1885, 1887, and 1888.

It should be remembered that the weight of bark purchased is no criterion to the quantity of quinine acquired by the buyer.

The following were the prices paid for sound bark:—

CEYLON CINCHONA.—*Original*—Red varieties: Ordinary to good bright quilly stem and branch chips, $1\frac{1}{2}d.$ to $2\frac{3}{4}d.$; thin twigs and dust, $\frac{3}{4}d.$; fair to good bright spokeshavings, $1\frac{3}{4}d.$ to $2\frac{3}{4}d.$; ordinary dusty root, $1\frac{3}{4}d.$ per lb. Grey varieties: Ordinary to good bright stem and branch chips, $1\frac{3}{4}d.$ to $3\frac{1}{2}d.$; good bright spokeshavings, $2\frac{3}{4}d.$ to $3d.$; root, $3\frac{1}{2}d.$ per lb. Yellow stem and branch chips, $2\frac{1}{4}d.$ to $5\frac{1}{2}d.$ per lb. Hybrid chips, $2\frac{1}{4}d.$ per lb. *Renewed*—Red varieties: Ordinary to good bright quilly chips and shavings, $1\frac{3}{4}d.$ to $3\frac{1}{2}d.$ per lb.; good quilly grey chips, $4\frac{3}{4}d.$ to $6\frac{1}{4}d.$; bright grey shavings, $5\frac{1}{2}d.$ per lb. Hybrid chips, $3d.$; shavings, $5\frac{1}{2}d.$

EAST INDIAN CINCHONA.—*Original*—Red varieties: Ordinary dull to fair bright stem and branch chips, $1\frac{1}{4}d.$ to $3\frac{1}{4}d.$; shavings, $1\frac{3}{4}d.$ to $2\frac{3}{4}d.$ per lb. Grey varieties: Ordinary dull to good bright quilly chips, $1\frac{3}{4}d.$ to $3d.$; broken quill, $4\frac{3}{4}d.$; root, $3d.$ to $3\frac{1}{2}d.$ per lb. Yellow varieties: Ordinary woody to fair bright quilly stem and branch chips, $1\frac{1}{4}d.$ to $5\frac{1}{2}d.$; a good parcel, $6\frac{3}{4}d.$; ordinary to fine bright spokeshavings, $3\frac{1}{4}d.$ to $7d.$; root, $3\frac{1}{2}d.$ to $4\frac{1}{2}d.$ per lb. Hybrid stem chips, $2\frac{1}{4}d.$; root, $3\frac{1}{2}d.$ per lb. *Renewed*—Red varieties: Ordinary woody to good bright stem and branch chips, $1\frac{3}{4}d.$ to $4\frac{1}{4}d.$; spokeshavings, $2\frac{3}{4}d.$ to $3\frac{1}{2}d.$ per lb. Grey varieties: Ordinary to good bright quilly stem and branch chips, $2\frac{3}{4}d.$ to $5\frac{1}{2}d.$ per lb. Yellow chips, $5\frac{1}{2}d.$; spokeshavings, $4\frac{1}{2}d.$ to $5\frac{1}{2}d.$ per lb.

JAVA CINCHONA.—Sixty-eight bags fair yellow branch sold at $3d.$ per lb.

SOUTH AMERICAN CINCHONA.—The only variety offered consisted of cultivated Bolivian *Calisaya* bark, of which 527 bales were shown. These sold at from $3\frac{1}{2}d.$ to $5d.$ per lb. for broken to fair medium round quill.

The following figures relate to the exports of cinchona-bark from Ceylon from January 1 to February 13:—1893, 721,883 lbs.; 1892, 506,698 lbs.; 1891, 725,198 lbs.;

1890, 921,749 lbs. The exports from Java for the last five years have been:—

	1892	1891	1890	1889	1888
Private plantations ..	5,968,745	7,165,927	6,109,423	4,066,382	3,136,086
Government plantations ..	568,845	742,760	518,884	772,988	529,942
Totals ..	6,537,590	7,908,687	6,628,307	4,839,370	3,666,028

The arrivals of bark in London have been heavy lately, the figures for the fortnight ending March 7 being 3,738 bales, including 999 Ceylon, 2,507 from India, 39 African, 108 South American, 75 Java, and 10 from Penang. Our stock in the warehouses on March 1, 1893, was 41,735 bales (against 48,405 bales on March 1, 1892), composed as follows:—Eastern barks, 19,198 bales; South American: *Calisaya* (flat and quill), 4,023; Crown and grey, 1,209; red, 70; Cartagena, 960; and Pitayo, Cuprea, North Granada, and South Colombian, 16,275 bales.

COCOA-BUTTER.—At auction on Tuesday 650 2-cwt. cases of Cadbury's cocoa-butter sold at an advance of about $\frac{3}{4}d.$ per lb. as compared with the February sales, the prices paid on this occasion being from $12\frac{3}{4}d.$ to $13\frac{3}{4}d.$ per lb.

CUBEBS.—The total exports of cubebs from Java were 2,801 piculs in 1892, 1,868 in 1891, 1,373 in 1890, 1,114 in 1889, and 148 in 1888. The market in Holland remains dull, while arrivals continue to take place. A newly-imported parcel of 127 bales small berries is about to be offered by auction, while holders of another lot of 63 bales cultivated berries are trying to find a buyer at the rate of about 62s. 6d. per cwt.

GALLS.—*China* galls are quiet but steady; for arrival (February-April steamer shipment) the quotation is 50s. to 51s. per cwt., c.i.f. terms. At auction 99 cases fine quality China galls were offered and bought in at 65s. per cwt. Blue *Turkey galls* continue to sell in a small way at 60s. per cwt., and white at 47s. 6d. per cwt.

GINGER.—New crop *Cochin* ginger was in large supply at Wednesday's spice-sales, but buyers were by no means keen, and of 1,026 packages offered only 200 sold at 5s. to 6s. decline, small to medium bright washed at 64s., fine small to bold, part scraped, 73s. 6d. per cwt. Old dull bold 1 cut brought 79s. 6d., dull C cut 71s. per cwt. Five barrels new crop *Jamaica* ginger sold at 63s. to 65s. for small scraped. Since this sale (which, it should be said, was mostly "without reserve") the market has again improved considerably.

GLYCERINE.—Slightly firmer. Some makers have raised their price to 50 $\frac{1}{2}$ per ton for double distilled s.g. 1.260, others would still take 48 $\frac{1}{2}$.

GUM ACACIA.—At to-day's auctions 2,196 packages of East Indian gum were offered, about half of which sold at a decline of 1s. to 2s. per cwt. on all kinds of Ghatti, except fine. Amrad gum sold well at full prices, with an occasional advance. Aden was neglected. The following prices were paid:—Ghatti, medium to fine pale, 56s. to 59s.; common to fair, 23s. to 33s.; pickings, 14s. to 15s.; siftings, 15s. to 16s. Amrad, ordinary brown to fair drop, 28s. to 29s. 6d. Cawnpore, fair to good, 31s. 6d. to 44s.; ordinary, 28s. 6d. to 29s.; fine to fine pale Kurrachee, 56s. to 64s.; good amber ditto, 50s.; good pale Madras, 39s.; Oomra, 44s.; common red-centred Aden brought from 37s. to 38s. per cwt.; dark to fair pale Australian sold at 25s. 6d. to 33s.; ordinary dusty pale white Mogadore at 48s.; and good small soft amber Cape sorts at 50s. to 53s. per cwt.

GUM BENZOIN.—An Amsterdam report states that the stock of benzoïn in that city has almost been cleared. At an auction-sale of 118 boxes good Sumatra seconds on March 2 the entire supply found buyers, with strong competition, at prices rather in excess of the valuation.

GUM KINO.—Still rising. Sales of good East Indian gum are reported at 16 $\frac{1}{2}$ and 16 $\frac{1}{2}$ 10s. per cwt., and it is now said that some holders will not sell below 18 $\frac{1}{2}$, though we believe there are others who would take less.

GUM OLIVANUM.—For fine drop high prices⁷ were paid to-day; common kinds, however, were rather lower. Of 977 packages offered about 530 sold at 56s. to 58s. for fine pale clean drop, 30s. to 37s. 6d. for medium to fair ditto, 25s. for common, 18s. to 20s. for ordinary to fair siftings, and from 12s. 6d. to 17s. 6d. for pickings.

GUM TRAGACANTH.—The market keeps exceedingly firm, with sales of good seconds at 14l. per cwt.; fourths at 10l. to 11l. 10s.; and common kinds at from 9l. 10s. per cwt. downwards. Heavy gum is exceedingly scarce, and for quantities which a year ago could not be sold at 45s., 7l. would now be readily paid.

INDIGO.—The following quantities of East Indian indigo have been declared for the sale which is to be held on April 10:—1,800 chests *Bengal*, 4,140 chests *Kurpah*, 340 chests *Madras*, 250 chests *Manila*, and 820 chests of sundry kinds; total, 7,350 chests. At the periodical sales of *Central American* indigo, held this week, 64 serons Mexican and 1,281 serons *Guatemala* indigo were offered. Competition was active, and for common to good qualities an advance of 2d. to 4d. per lb. was paid, while low grades were slightly lower. The quotations were:—*Guatemala*: *Flores*, 5s. 8d. to 5s. 9d.; *Sobres*, ordinary to good, 4s. 8d. to 5s. 6d.; *Cortes*, good ordinary to fine, 4s. 6d. to 5s. 3d.; low to ordinary, 3s. to 4s. 5d. Mexican, good ordinary to good, 4s. 1d. to 4s. 5d.

INSECT-FLOWERS.—The stock in Trieste has been very considerably reduced, and on March 1, it is stated, was only about 2,300 cwt., against 6,318 cwt. on March 1, 1892.

IPÊCACUANHA.—Fifty-eight packages (in two consignments) were received from Monte Vide per *Trent* this week. Holders of *Carthagen* root are demanding 5s. 6d. per lb. for fine stout sound root, but they cannot get it.

JABORANDI.—None is offering here at present, and there are no reports of any coming forward. In Liverpool prices rule lower. The recent arrival of 33 bales has been sold at 12½d. to 13d. per lb.

JALAP.—Nothing has been done in London since our last report, but there is news to-day that the price has advanced in New York, where 20 bales are said to have sold at the parity of 1s. 6d. per lb.

LYCOPDIUM is offering cheaper for prompt shipment, 1s. 9d. per lb. c.i.f. being the quotation.

MUSK.—Small sales of fine thin skin Tonquin pods, first pile, are reported at 77s. per oz.

OIL (COD-LIVER).—The market is again lower, and it is now possible to buy oil described as "non-congealing Lofoden oil of the new crop" at 61s. per barrel in London.

OILS (ESSENTIAL).—Of *Cajuput* oil 349 baskets have recently been imported into Amsterdam and sold at the rate of about 34s. per basket. *Menthol* keeps steady at 10s. 6d. per lb. on the spot. American *Oil of peppermint* (HGH) is not quite so firm as it has been, and may now be bought without difficulty at 12s. 6d. per lb. Wayne County *Peppermint* oil is quoted at 10s. 3d. per lb., and the following are the prices of some of the D. & O. brands of essential oils:—*Peppermint* in bottles, 11s. 9d.; ditto in tins, 11s. 3d.; *wintergreen*, 8s.; *sassafras*, 1s. 7d. to 1s. 8d. per lb. *Star-anise* oil slow of sale, at 5s. 10d. per lb.

OPIMUM.—A firm market, with sales of fine druggists' opium at 8s. 9d. per lb. Good to fine *Soft shipping* opium is quoted at 10s. 6d. to 12s. per lb. In *Persian* a large business is reported to-day at 9s. 6d. to 10s. 3d. per lb. for ordinary to fair quality. Good is held for 10s. 6d. per lb. A Constantinople report, dated March 1, says:—"The sales during the month of February on this market amounted to 162 cases druggists', of which about 80 cases went to America, and the balance to speculators and Continental buyers; 43 cases two to three-year-old *Malatia* talequale at 8s. f.o.b.; and 20 cases *Tokat* talequale at 8s. 6d. f.o.b. The belief that the spring-sowings have more chance of succeeding is sufficient to cause dealers more willingness to realise at present values. Prices in consequence are a trifle weaker, closing at 7s. 9d. to 8s. f.o.b. for druggists', and 8s. 6d. to 8s. 7d. f.o.b. for *Tokat* talequale. That serious damage to the already reduced crop has been done is beyond doubt, and the output cannot now be reasonably figured at

much over 4,000 cases even with favourable weather." It is reported from *Salonica* that half the crop has been destroyed, and that the outturn will be much smaller than last year's. It remains to be seen how far the spring-sowings will make up for the existing deficiency, but under the most favourable circumstances henceforward it is not expected that a crop of more than 5,000 to 6,000 cases will be produced. (This is from *Smyrna*.) The sales in *Smyrna* during the month of February amount to nearly 500 baskets, 200 of which has been shipped off to the American market.

OPIMUM SALTS.—The *Morphia* manufacturers raised their price on March 7 to 4s. 3d. per oz. for *Hydrochlorate* in powder, and 4s. 6d. for ditto in crystals. This is an advance of 3d., but it is possible to buy below these rates in second-hand. *Codeia* is quoted at 12s. 6d. per oz.

ORANGE-PEEL.—It is said that some thin-cut Malta peel has been sold at 10d. per lb. this week, which indicates a slightly-improved price.

ORRIS-ROOT.—Fairly steady. Verona root is offering at 70s. to 72s. 6d. per cwt., f.o.b. Leghorn.

PEPPER.—*Black pepper* is generally quiet, but fair to good *Lampong* sold at auction at somewhat higher prices—viz., 2½d. to 2½d. per lb. Ordinary to medium *Aleppy* brought 2½d. to 3d., and fair dull *Tellicherry* at 3d. per lb. *White pepper* is also without animation, fair to fine bold *Singapore* selling at 4½d. to 6d., and very fine bold *Tellicherry* at 9½d. to 10½d. per lb.

QUICKSILVER is very firm. There is very little left in second-hand, and the principal importers are said, this week, to have refused an offer of 7l. 6s. 6d. for a considerable quantity. Their price is 7l. 7s. 6d. per bottle. There has been another arrival of 5,000 bottles from Spain.

QUININE.—The market is quite stagnant, with a sale of second-hand German bulk at 9d. per oz. for 1,000 oz.

RAPESEED is rather scarce and in fair demand at 46s. to 48s. for *French* and 52s. to 56s. per 416 lbs. for *Dutch* seed.

RHUBARB.—It is said that a parcel of new crop *Shensi* root has just been received. This would be remarkably early, for the new rhubarb does not usually arrive before May, and the *Shensi* crop generally only comes after the Canton.

SANTONINE is still rising. On the spot 6s. per lb. is now asked.

SHELLAC.—Previous to the weekly auctions the market was exceedingly quiet, and prices for delivery were lower, 101s. per cwt. being accepted for 300 cases orange TN for May delivery. The decline is ascribed to the influence of "bear" speculators, who have made use of the circumstance that the shipments of shellac from Calcutta in February were much larger than was anticipated with considerable effect. At the auctions on Tuesday 987 cases were offered, of which only 209 sold, the demand being exceedingly poor. *Orange* lac dropped from 2s. to 5s., and *Garnet* from 1s. to 2s. per cwt. as compared with the previous sales. *Button* lac, however, was well maintained in price. The following prices were paid:—*Second orange*: Unworked dull reddish to good pale, 102s. 6d. to 107s. 6d.; lively flat and fair pale broken, 96s.; worked reddish lively, 96s. per cwt.; *Garnet* good unworked AC, 92s. to 93s.; *Button* unworked, fair second in circle, 110s.; dark and resinous, 70s. to 74s. per cwt. Privately good first *Button* lac is said to have been sold at 130s. per cwt. since the auctions. During the second half of the week the market again advanced, and about 2,000 cases *Orange* TN sold for delivery at 101s. for May, 100s. for June and July, 102s. for August, and 101s. 6d. for September, and to-day the market closes flat and slightly lower.

SPERMACETI.—*Chilian* has been sold in Liverpool at 1s. 2½d. per lb., and for *North American* 1s. 4d. per lb. is asked there.

SPICES (VARIOUS).—The demand for *Pimento* has continued, and a considerable amount of business is reported at firmer rates. At auction, however, only 100 bags sold, at 3½d. to 3½d. per lb. for medium to good fair. The market for *Chillies* continues depressed, and the small quantities of *Sierra Leone* and *Zanzibar* that were offered for sale at auction were bought in without offers. *Nutmegs* are in demand at higher prices, but *Mace* remains flat.

TEA.—The tea trade is loudly complaining of dull business this week, and not without reason. Retailers are very disinclined to buy unless they are actually compelled, probably reckoning that the longer they can hold off the better they will be able to buy, and it is certainly matter for surprise that prices have been as well supported as they have. On Tuesday, at the heavy Ceylon sale, prices were very fairly supported, and though here and there 9*d.* to 11*d.* Pekoes and orange Pekoes were a trifle easier, on the whole prices were remarkably steady, especially for common grades, and for 10*d.* to 11*d.* broken Pekoes. Assams are rather inclined to weakness for lower grades, and the terminal market is very quiet. Capers from 5*d.* to 7*d.* are remarkably cheap, and would be worth attention were it not that the large supplies and undoubtedly diminishing consumption render the future of scented teas very uncertain.

TONQUIN BEANS.—Fine frosted Pará beans have been sold in Liverpool at 2*s.* 11*d.* per lb.

TURMERIC.—The market is very dull, and only small sales are reported, at 23*s.* per cwt. for *Bengal* and 8*s.* 3*d.* per cwt. for split *Cochin* bulbs. At auction 520 bags *Cochin* turmeric were shown, and of these 87 bags sold at 7*s.* to 7*s.* 3*d.* per lb. for small rough split bulb.

VALERIAN.—French root has advanced in price to 32*s.* 6*d.* per cwt.

WAX (JAPAN).—Good pale squares on the spot have been dealt in at 37*s.* 6*d.* per cwt., and now the nominal price is 38*s.*

THE LIVERPOOL MARKET.

GINGER.—Further arrivals of new crop *African* have taken place but importers still talk of 55*s.*, and this price will be paid.

GUM ACACIA.—There have been further arrivals of Soudan sorts, and values are a little easier.

HONEY.—More business is passing in *Chilian* at late values. The new crop is arriving sparsely and slowly.

OIL (CASTOR).—The fall in *East Indian*, which commenced last week in consequence of heavy arrivals, has continued, and the price of good seconds Calcutta has declined to 3½*d.* per lb. The bottom, however, seems to have been reached, and holders are now talking of more money.

TONQUIN-BEANS.—Parcels of black *Parás* that were offering on the market have been withdrawn by holders owing to advices from abroad.

WAX (BEES').—More attention has been paid to *Chilian* during the week, and sales have been made at 6*l.* 15*s.* to 7*l.*

THE DUTCH MARKET.

AMSTERDAM, March 9.

THE cinchona auctions to be held here on March 23 will consist of 73 cases and 6,796 bales, or about 577 tons, Java bark, divided as follows: From Government plantations, 12 cases and 394 bales (about 37 tons); from private plantations, 61 cases and 6,402 bales (about 540 tons). This quantity contains: Of druggists' bark—*Succirubra*, quills, 9 bales 73 cases; broken quills and chips, 640 bales; root, 43 bales. Of manufacturing bark—*Ledgeriana*, broken quills and chips, 4,448 bales; root, 1,069 bales. *Officinalis*—broken quills and chips, 33 bales. *Hybrid*—broken quills and chips, 423 bales; root, 124 bales. *Calisaya*—root, 7 bales.

DISTILLING WITCH-HAZEL.—According to an American paper, the bark of witch-hazel is for purposes of distillation stripped off in the spring, about the time the sap is beginning to run. By the process of distillation in use nowadays, not only is the bark put in the still, but the whole stalk, the properties of which are very similar. To the extract thus obtained is added about 14 per cent. of alcohol as a preservative.

LONDON DRUG STATISTICS.

THE following figures relate to the imports, landings, and deliveries of drugs at the Port of London during the two months February 28, 1893 and 1892:—

Article	Stocks		Imported		Delivered	
	1893	1892	1893	1892	1893	1892
Aloes cs & pkgs	5,753	6,933	567	637	617	806
".....gourds	835	1,105	198	—	164	—
Anise, star chts	517	52	423	10	145	—
Arrowroot.....cks	7,220	4,005	4,932	3,781	3,009	2,704
".....bxs & tins	437	442	275	262	271	773
Balsams.....cks, &c.	1,374	1,592	171	237	166	200
Bark (Cinchona),						
S. American cases	56	371	—	—	—	1
".....bls, &c.	23,097	26,768	1,537	2,738	1,398	2,481
E. I., Ceylon, and						
Java.....cs	147	226	30	—	26	22
".....bls.	18,653	22,308	7,970	6,224	5,055	5,927
Borax pkgs	5	261	—	—	256	—
Columba.....	294	572	234	31	440	106
Camphor.....	3,018	4,676	1,335	2,237	1,044	1,888
Cardamoms.....chts	556	619	315	484	312	308
Coc. Ind. bgs, &c.	620	434	—	—	67	56
Cream of tartar cks	11	10	1	—	1	—
Cubebs.....bgs	435	69	216	24	100	49
Dragon's Blood chta	103	104	4	45	19	40
Galls, China, &c. cs	625	1,901	489	844	386	572
Trky & Prsn..sks	1,424	2,227	90	545	903	611
Gums—						
Ammoniacum pkgs	144	52	3	32	5	44
Animi & Copal						
pkgs	11,654	7,668	3,397	4,594	2,279	2,928
Arabia.....	12,000	17,035	3,331	3,272	3,471	3,607
Asafoetida ..	85	450	197	73	196	143
Benzoin	2,088	2,617	446	249	462	660
Damar.....	4,143	4,488	1,185	859	624	631
Galbanum ..	31	31	—	—	—	5
Gamboge ..	104	51	14	59	67	43
Guaicum ..	219	198	38	79	14	8
Kiou	2	2	—	2	—	7
Kowrie tms	779	1,053	205	640	432	626
Mastic pkgs	29	28	12	—	4	3
Myrrh	369	273	147	14	57	101
Olibanum ..	2,811	4,353	1,277	1,408	796	1,258
Sandarac ..	898	660	143	395	194	169
Tragacanth ..	605	3,071	422	1,108	615	1,724
*Indiarubber, E.I.tms	74	252	70	100	157	127
Madagascar ..	113	118	101	51	100	46
S. American ..	26	73	37	47	60	29
African, &c. ..	146	208	40	72	97	98
Ipecac.....cks & bgs	643	220	224	95	292	290
Jalap.....bls	86	57	62	53	32	33
Nux Vomica ..pkgs	592	491	124	86	137	60
Oils—						
Castor.....cks	73	101	80	105	142	73
".....cs	1,620	3,646	481	1,254	561	1,010
Cocoa-nut ..tms	1,068	1,462	856	128	591	885
Olive cks, &c.	831	613	515	250	211	412
Palm tms	10	40	6	28	5	9
Rhubarb chts	867	372	97	177	237	212
Safflower ..bls, &c.	37	157	—	1	21	65
Sarsaparilla ..bks	326	334	132	201	271	196
Senna bls, &c.	1,892	2,754	967	467	616	599
Shellac ..						
Orange	19,971	29,540	4,310	6,350	4,633	3,671
chts, &c.						
Garnet ..	3,096	4,004	725	3,279	1,493	1,108
Dnton ..	2,378	6,380	728	1,212	1,776	1,319
Total chta, &c.	25,445	39,924	5,763	10,841	7,902	6,068
Sticklac ..chts, &c.	558	195	639	—	390	157
Gambier tms	391	1,597	1,766	2,389	1,881	2,286
Cutch tms	2,030	2,596	248	564	437	341
Turmeric, Beng. tms	93	393	69	5	37	59
Madras, &c. ..	165	207	59	99	57	13
Total	258	600	128	104	94	72
Vermilion, chta, &c.	77	48	10	37	1	15
Wax (bees') ..bls & srns	508	575	98	143	527	420
".....cks & cs	1,587	933	357	264	341	289
".....cakes	42	14	—	—	—	—
" (Japan) ..pkgs	1,130	929	850	400	145	95

* Stock of Pará rubber at Liverpool, 445 tons; other sorts, 683 tons—total, 1,133 tons, against 2,165 tons last year and 1,289 tons in 1891.



Memoranda for Correspondents.

In letters for publication correspondents are requested to express their views as concisely as possible.

Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.

The name and address of the writer should accompany all communications with, if desired, a distinctive nom-de-plume.

The Sale of Poisonous Medicines.

SIR.—I read with great interest your excellent reports of The Pharmaceutical Society *v.* Piper. The judgments which have been so emphatically pronounced in the different courts must be eminently satisfactory to all chemists, and I am not surprised at the defendants declining to appeal any further against them.

My object in writing is, with all due deference, to make a suggestion to the Society. In order that the splendid victories they have achieved should be advantageously used for the benefit of the trade, I think it will be necessary to appoint inspectors to find out and summon those people who break the law by selling in open shop those goods which they are forbidden to sell. Centres in different parts of the country should be made the home of an inspector, and power should be given to him to work, we will say, the whole of the county in which he may reside, and for his remuneration let him be paid by results—that is, a moderately liberal sum for each conviction obtained through his instrumentality. For the first twelve months at least he would obtain plenty of cases, and it would undoubtedly be a profitable employment during that period. It appears to me to be imperative that some system of espionage should be established, otherwise the good results which should follow the successes of the Society will be *nil*. The Adulteration Acts would practically have been inoperative but for the vigilance of the inspectors appointed for the purpose of enforcing those Acts.

Your obedient servant,
SUBSCRIBER. (254/48.)

SIR.—In your issue of March 4, page 310, we notice included in the list of preparations *to be sold by chemists only*, "Crosby's Cough Elixir." As proprietors of this well-known medicine, we beg to draw your attention to the fact that this preparation *does not* contain poison, and can, therefore, be sold by any licensed retailer of patent medicines. We shall be glad if you will insert this notice in your next issue.

We are, yours, respectfully,

DR. CHARLES ROOKE (LIM.),
Scarborough, March 7. E. E. JUDSON, Secretary.

SIR.—We note that on page 311 of THE CHEMIST AND DRUGGIST, March 4, you state "Messrs. Kay add that they are prepared to defend any action." It should read "an action."

Yours faithfully,

For KAY BROTHERS (LIM.),
Stockport, March 6. GEO. A. DOWNS, Secretary.

Pharmaceutical Fiction.

SIR.—I have seen some strange statements relative to pharmacy and therapeutics in fictional literature, but think the following pathetic paragraph is simply wonderful, and does great credit to the imagination of the writer thereof. It is culled from a chapter in a serial story entitled "Her Dreadful Secret," at present appearing in the *Liverpool Weekly Post* :—

"... Of late she has been unable to obtain even so much as a single hour's sleep throughout each long and weary night without having recourse to narcotics. She takes brucine hydrate ere retiring to bed, and already, during the brief period that I have been here, she has had to increase the dose

from fifteen to thirty grains (!), and a larger quantity cannot be taken without seriously endangering life. I have not prevented her from indulging herself to the maximum safe extent, because the brucine, with calm and prolonged sleep as a consequence, I consider to be less perilous to her, in her present state of health, than no brucine, and therefore no sleep, might prove. . . . A great many people who desire painless, and what is, I have been given to understand, actually a pleasant, death commit suicide with hydrate of brucine.

ROHAMI. (234/10.)

A Doctor's Formulæ.

SIR.—The enclosed were left with another equally ridiculous, to be made up, by a well-dressed man styling himself Dr. —. As specimens of the grossest ignorance of pharmacy, I thought they might amuse, if not interest, your readers.

Yours truly,

Hull, March 4. L. (253/14.)

Peruvian bark	1 oz.
Carbonate of lithia	2 5ij. (sic)
Pareira brava	4 oz.
Bromide of potass.. ..	5j.
Hydrastie C.	½ oz.

Put ½ oz. of pareira into 1 oz. of boiling water; let it stand 2 hours, then add finely-powdered hydrastie canad. 1 oz. (sic). Mix well, and reduce to the consistence of syrup by evaporation! Put 1 oz. of Peruvian bark (Calisaya) to 2 oz. of boiling water; let it boil 5 minutes, filter and add 1 oz. of bromide of potass. Wash 2 drs. of the salts of lithia in proper vessels and add all the ingredients together, and heat on a slow fire in a close-covered vessel to 100° specific gravity. Remove to a mortar, pulverise well, and triturate. Divide the whole into 25 powders.

Ext. nux vom.	½ gr.
Staphisagria	½ "
Blood root	5j.
Ext. buchu	5ij.

Macerate ½ gr. of ext. nux vomice in 2 drs. of warm water; let it stand for 12 hours; then percolate by displacement with the customary apparatus and add 1 dr. of powdered blood root and ½ gr. of staphisagria. Then macerate 5ij. of extract buchu in ½ oz. of warm water for 6 hours, and percolate as the ext. nux vomice. Mix all in a porcelain mortar, triturate well, and apply the usual heat for pharmaceutical purposes till the whole is reduced to a pill-mass, to which add the usual excipients. Make into 25 pills and sugar-coat them.

Trade-mark Protection in Bulgaria and Greece.

SIR.—It may interest your readers to know that a Merchandise Marks Act has been recently passed by the Bulgarian Sobranjé, and that a Bill for the protection of industrial and trade marks has passed the second reading in the Greek Chambers.

The Bulgarian Act provides that those who wish to retain the exclusive use of a trade-mark must submit it for registration in the prescribed manner. The period of protection is ten years, renewable. Manufacturers and merchants who have already adopted any mark for their goods may apply to have it registered within six months from the publication of the law in the *Official Gazette*. After that term their trade-mark will be considered as null. Infringers of registered trade-marks are subject to heavy penalties.

The Greek Bill also provides for a system of registration under which ten years' protection (renewable) will be obtainable. Foreigners must produce certificates showing registration in the country of origin in order to be able to secure registration of their trade-marks in Greece. Infringers of registered trade-marks will be liable to fine and imprisonment.

Yours faithfully,

REGINALD W. BARKER, F.I.Inst.
British Trade Protection Office,
London, Feb. 28.

The Hypoderm Refrain.

SIR.—I must apologise to Messrs. Allen & Hanburys (and to you) for having inadvertently misused their term. The verses were very hastily written in an idle half-hour and were sent off without revision. I did not, as you know, refer even to the conditions of the competition.

Epworth, March 6.

I am, &c.,
C. C. BELL.

The Medicine-Stamp Act.

SIR,—The following correspondence will be instructive to all who endeavour to avoid conflict with the Somerset House authorities; your readers will doubtless appreciate the subtle distinctions which render labels liable or otherwise.

Whilst entirely agreeing that it is futile to expect the abolition of a productive tax which does not apparently meet with any complaint on the part of those who pay it, there exist, however, certain details of incidence which if placed before the "Commissioners" by a fairly representative body of pharmacists would meet with such consideration as to remedy many objectionable features, such as, briefly stated—exemption of Pharmacopœia preparations, declaration of offence at time of purchase, abolition of moiety to inspectors—a system demoralising to the service and practically leaving the vendor at the mercy of any unscrupulous official.

We are, Sir, yours obediently,
285 Brockley Road, S.E., LEO ATKINSON & Co.
March 7.

[Messrs. Atkinson seem to have been especially favoured by the Board. The correspondence they send us is too long for publication, especially as it would need the printing of about a dozen labels to make it fully intelligible. The chief point raised was in regard to a label for skin-lotion. As first submitted this label read as follows:—

SKIN-LOTION, as prescribed by many eminent authorities in skin-affections. An invaluable preparation in roughness, redness, and irritabilities from any cause whatever; absolutely free from anything injurious; is most agreeable and pleasant to use.

In September, 1891, the Board said this label rendered the preparation liable, but they said if the words "and irritabilities from any cause whatever" were omitted the article might be sold without a stamp. The words were omitted, but last month Messrs. Atkinson were informed that they had incurred a penalty for selling the article. They referred the Board to their previous correspondence and the claim was withdrawn, but the Board said they entertained no doubt that the words "as prescribed by many eminent authorities in skin-affections" renders the skin-lotion liable to medicine-stamp duty, and in any reprint of the label those words must be omitted.

Messrs. Atkinson again obeyed, but they then asked the interesting question whether "as prescribed by many eminent authorities"—"for skin affections" or the combination of sentences constitutes liability, and to make the matter clear they submitted two labels, one headed "skin-lotion for skin affections," and the other "skin-lotion as prescribed by many eminent authorities." The Board's reply was that the first was, and the second was not, liable.]

Sale of Wine-essence.

SIR,—Herewith I enclose you reply from Board of Inland Revenue in reference to sample of ginger-wine essence prepared from following formula:—

Tinct. zingib. fort.	..	..	..	..	5ij.
Tinct. capsici	...	...	...	...	5ij.
Sacchar. ust.	..	..	..	..	3ss.
Acid. tart.	...	...	...	...	3ss.
Aquaad	..	..	..	..	3iij.

M. et S.

—flavoured with a few drops lemon, to be added to 3lbs. loaf sugar dissolved in 1 gallon water.

Ex En 986
93

Inland Revenue,
Dumfries, February 28, 1893.

DEAR SIR,—The Board direct me to acquaint you that a compounder's licence is necessary to enable you to sell ginger-wine essence prepared according to sample, and other persons selling the article would require to hold proper spirit-licences.

I am, yours faithfully,

Mr. J. W. Sutherland.

R. D. MACGLASHAN, Supervisor.

On reading your article on the sale of ginger-wine essence some weeks ago I approached the Inland Revenue on the matter, and submitted a sample bottle of that usually sold in Dumfries, and which you can see contains no free spirit. All the preparations are B.P. strength, and the sale of the essence in the south-west of Scotland is very large. The working classes use it in many cases instead of tea, and

working men frequently use it for dinner instead of the usual flask of cold tea to wash down the solids.

The restriction put upon the sale by necessitating each maker to have a compounder's licence, and each seller to have a magistrate's spirit-licence, will completely stop the putting-up and selling of the article by chemists, and a profitable extra will again be turned into the hands of the licensed grocer.

It appears to me absurd that the Revenue can prevent a preparation of this kind from being sold, seeing that the ingredients are simply mixed in one bottle for convenience, when they cannot stop the sale of any of them if supplied separately according to B.P. And if they say a spirit-licence is necessary for the retail sale of them, I should say that it is equally necessary for all flavouring-essences prepared with spirit; and we know that unlicensed grocers, &c., sell these preparations of spirit without let or hindrance, although many years ago, I am informed, the matter was settled in Court against the unlicensed grocers selling flavouring-essences.

This is a matter of considerable interest to many chemists, and by publishing this we may be able to draw attention to the grievance complained of.

Yours faithfully,

Dumfries.

JOHN W. SUTHERLAND.

[We do not think that Mr. Sutherland's assumption is certainly correct that an unlicensed person may sell any spirituous preparation provided the formula for it appears in the Pharmacopœia. If there should be good reason to believe that the preparation were sold for the purpose of producing a beverage, we understand that the Board could obtain a conviction.]

Instead of "Patent Medicines,"

Sigma (252/57) recommends the adoption of the phrase "stamped" or "secret" medicines, preferably the former. This was suggested by several correspondents last week. Mr. William Kirkby, Manchester, suggests "taxed medicines."

Are they Spies?

We still continue to receive letters and postcards which have been sent to chemists by remotely resident strangers asking for lists of specialities, &c. Two specimens have come in this week. One London chemist has received a postcard from the Loekerbie grocer who has been before mentioned, and another gets an order and stamps from a lady at Gatehouse, N.B., for some corn-solvent and a price-list of medicines.

DISPENSING NOTES

Correspondents should consult "The Art of Dispensing" in regard to dispensing difficulties. Difficulties not explained therein may be sent to the Editor, who invites a general expression of opinion upon the under-mentioned topics.

Guaiacol. Mij. Ft. pil.

SIR,—I find that it is impossible to get this into an ordinary size pill except by the following means:—Rub the guaiacol with potass. carb. gr. iss. in a warm mortar. This forms a hard mass, which works up very well with pulv. glycyrrh. and glycer. trag. By this means a pill of about 4 grs. size can be obtained. Would you advise this mode of dispensing them, or will the pot. carb. affect the guaiacol medicinally?

Up to the present I have failed to find a satisfactory excipient except the pot. carb., which certainly makes a good pill, and with little trouble.

Yours faithfully,

HANTS. (246/44.)

Ext. Hamamel. Dest.

250/9. *H. Jones*.—It would be foolish to give tincture of hamamelis for this. Clearly a distilled preparation of the fresh bark is intended, and that you have in hazeline and similar compounds.

Liquorice in Mixtures.

SIR,—I have had some difficulty in the following mixture:—

Soda bicarb.	..	..	..	..	3vj.
Magnes. carb. pond.	..	..	..	..	3iv.
Ammon. brom.	..	..	..	..	3ij.
Ext. glycyrrhiz. liq.	..	..	..	..	3iv.
Syrupl	..	..	..	..	3xviii.
Aq. chlorof. ad	..	..	..	..	3vj.

Would you kindly tell me the best way of dispensing the above? As soon as the extract of liquorice is added a brisk effervescence is set up, and continues for some time. I have tried four different samples of the extract, but they all seem acid. Should the mixture be warmed to hasten the chemical change?

TROUBLED. (253/63.)

[The active principle of liquorice combines with alkalies to form "glycyrrhizates," and that fact accounts (in part, at least) for the evolution of carbonic-acid gas in this case. If the liquid extract be added to the bicarbonate of soda and an ounce of the water contained in the mortar, and the whole be well stirred, interaction will quickly be complete. There is no need for heat.]

A Quinine-mixture.

SIR,—How would you dispense this?—

Tr. quina. ammon.	..	..	..	..	3xij.
Tr. bellad.	..	..	..	..	3j.
Sodii bromid.	..	..	..	..	3iss.
Aq. ad	..	..	..	..	3vj.

M.

Ft. mist. 3ss. t. d. s.

Blandford.

F. S. HICKMAN.

[Questions of this nature are fully dealt with in "The Art of Dispensing." Quinine hydrate is precipitated, and must either be dissolved by the addition of spirit or suspended with mucilage. It is for the prescriber to decide which, and, if he is not available, the latter course is the proper one.]

An Excipient Wanted.

SIR,—What is the best excipient for the following pill?—

P. Doveri	..	..	..	..	gr. iiij.
P. myrrhæ	..	..	..	..	gr. j.

M.

Biggleswade.

Yours truly,

F. A. U. SMITH.

[What is the matter with glycer. tragacanth?]

LEGAL QUERIES.

Immediate information on pharmaco-legal matters is available in "Pharmacy and Poison Laws of the United Kingdom," Alpe's "Handy-book of Medicine-stamp Duty," and THE CHEMISTS' AND DRUGGISTS' DIARY, page 152 et seq.

254/34. *Pharmacien*.—If the companies are registered as limited liability companies, as we believe they are, a list of their shareholders can be seen at Somerset House on payment of 1s.; or on the same payment at the registered office of the company (to members gratis); or the secretary must supply a list to any applicant on payment of 6d. per 100 words.

254/33. *Caryoph*.—You may keep up to 3 gallons of benzine if in bottles not exceeding 1-pint capacity, securely stopped, without a petroleum-licence. See DIARY, page 155. We do not know whether any insurance offices would object to this being in stock. They can make what conditions they think proper.

253/57. *Phonix* asks:—"Can a chemist without a methylated-spirit licence make and sell the four liniments permitted by the authorities with spirit or with finish?"

Also is he allowed to make and also sell varnishes, polishes, &c., made with either?" A chemist not holding a licence to retail methylated spirit is in the position of any other member of the public; he may buy methylated spirit from a licensed retailer in quantities not exceeding 1 gallon at a time, but he may not be supplied by a methylator unless he get special authorisation. He may use the methylated spirit for the purposes indicated. He can buy "finish" in any quantity he likes, and use it. He may (as far as the Inland Revenue laws are concerned) sell the products (except as beverages) without any licence. A licensed retailer may make the four liniments with methylated spirit, but he may not make anything else with methylated spirit unless he get the special authorisation of the Board (see THE CHEMIST AND DRUGGIST, Feb. 16, 1893, page 234, and March 30, 1893, page 417). No one can get the purer methylated spirit for any purpose without special authorisation.

252/42. *W. T. C.*—We should have supposed that the lozenges were liable to medicine-stamp duty. Do you know that the Board have exempted them?

253/47. *T. W. S.*—Respecting wine essences, refer to pages 51, 81, and 292 of current volume of THE CHEMIST AND DRUGGIST, and to letter on previous page.

253/50. *Ivor*.—"What body or corporation should proceed for the recovery of penalties incurred by using a title which signifies that the user is registered under the Medical Act, 1858?" Anybody by proceeding in the manner set forth in section 41. All penalties go to the Medical Council.

256/23. *H. C.*—We cannot make trade-mark searches. These must be made at the Trade Marks Office, Southampton Buildings, London, and a fee of 1s. per ¼-hour is charged.

MISCELLANEOUS INQUIRIES.

The Editor replies to queries of general interest, in the order in which they are received. Replies are inserted according to the space available. Postal answers cannot be supplied.

Back numbers, containing formulae, educational or other specific information can be obtained from the Publisher.

237/51. *Limonis* (Missoorie).—We have waited a fortnight after receipt of your letter, but your parcel has not been received. (1) Sweet Essence of Orange for taking cod-liver oil in was, we expect, something of the limejuice-cordial nature. Try the following:—

Citric acid	..	..	..	..	3ij.
Salicylic acid	..	..	..	..	gr. x.
Tincture of fresh orange-peel	..	..	..	..	3iij.
Rectified spirit	..	..	..	..	3iij.
Orange-flower water	..	..	..	..	3j.
Distilled water	..	..	..	..	3j.
Syrup to	..	..	..	..	3xij.

Dissolve the citric acid in the waters, and the salicylic acid in the spirit and tincture. Mix with the syrup.

(2) *Eucalyptus Mouth-wash*:—

Saccharin	..	..	..	..	gr. vj.
Salicylic acid	..	..	..	..	3ij.
Menthol	..	..	..	..	gr. iv.
Thymol	..	..	..	..	gr. iiij.
Eucalyptus oil	..	..	..	..	3iss.
Essence of musk	..	..	..	..	3j.
Rectified spirit	..	..	..	..	3viij.

Dissolve, and add—

Glycerine	..	..	..	..	3iss.
Rose-water to	..	..	..	..	3xij.

Shake up with about a teaspoonful of fuller's earth, allow to stand for a day or two, filter, and tint with saffron or cochineal colouring.

(3) We cannot at present, but shall keep the query before us.

118/33. *Magnes. Sulph.*—The whole of the water of crystallisation, except one atom, can be driven off from Sulphate of Magnesia by heating to a temperature of 150° C. The best way to do that is to expose the sulphate in thin layers in a kitchen or gas oven, or you may heat gradually with constant stirring in an evaporating-dish. The last atom of water of crystallisation cannot be removed by heat or any other simple means.

247/63. *Scribo.*—Acne arises from many causes besides syphilis, and your friend's suggestion that your trouble is syphilitic may be perfect nonsense, or it may be true. You had better consult a doctor about that.

247/46. *J. Pell.*—To Mark Photo-negatives with the name of the subject use Berlin black, printing the name on the left-hand bottom corner. It will then appear white on the print.

247/40. *Gregorian.*—The composition of Incense used in churches varies somewhat; but the following formula is one which has been in use in a Roman Catholic convent for many years:—

Benzoin	3iv.
Storax	3iv.
Lb dnum	3vj.
M. rri	3vj.
Cascarilla	3iij.
Oil of lavender	℥xx.
„ bergamot	℥xx.
„ cloves	℥x.
„ cinnamon	℥viij.

Reduce the solids separately to coarse powder; mix the oils intimately with the cascarilla, and add the gum-resins; finally pass through a coarse sieve.

If labdanum cannot be got, olibanum may be used, but it must be of the best quality, and free from alliaceous odour. Use also the best qualities of the other gum-resins, and preferably Siam benzoin.

248/31 (*Alpha*) and 247/52 (*W. F. L. & Son*).—Coating for Horse-balls.—The following formula provides a good, hard coating, which quickly dissolves in the alimentary canal:—

Gelatine	3vj.
Sugar	3j.
Mucilage of acacia	3j.
Water	3v.
Glycerine	3ss.

Soften the gelatine in the water, add the mucilage, glycerine, and sugar and dissolve by the heat of a water-bath.

To coat the balls, having obtained them perfectly round and smooth, dip the whole of a ball into the hot solution, and suspend in the air to dry. Of course, each ball must be affixed to a pin, and this in its turn may be tied to a rod by means of strong linen thread. Or the balls may be coated as oval pills are—first one half, and then the other, after the first has dried. This avoids the pin-hole.

247/51. *Pshgli.*—*Ipecacuanha* is a homœopathic remedy, and an excellent one in small doses, for checking the sick-vomiting of pregnancy, &c. It is given in 1-minim doses of the wine frequently repeated. Your prescription is a less scientific example of the same notion.

247/54. *Rail. Gent.*—**Spirit Gum for Fixing False Hair.**—A sample of this which we examined consisted of yellow resin 1 part with 3 parts of spirit, perfumed with citronella. It is the better for the addition of 30 minims of castor oil per oz. to case off brittleness.

248/27. *Spes.*—To an inquiry regarding butter-flavouring we recently had a reply from Messrs. Oldfield, Pattinson & Co., of Manchester. Write to them.

120/3. *Jumbo.*—If pure morphia is used in the toothache-preparation it will dissolve, otherwise the formula is good, although a little complex. Menthol and Cocaine make a good preparation for toothache. The following is a suitable formula:—

Menthol	3ss.
Cocaine hydrochlorate	gr. v.
Compound tincture of chloroform	3j.
Rectified spirit to	3j.

Dissolve all mix.

The quantity of cocaine may be doubled or quadrupled if a good price can be got for the drops. The tincture is merely to colour and flavour.

243/43. *Ebor.*—**Graph-composition.**—See *C. & D.*, July 16, 1892, page 89.

248/24. *Cave Canem.*—The reply is not very satisfactory.

251/64. *Cymro.*—See reply to "Alpha."

249/55. *Cupri Sulph.*—You may use oil of peach-kernels in place of cotton-seed oil.

250/46. *G. A. Barnes.*—The smell of benzolene cannot be got rid of entirely.

251/2. *A. W. H.*—**Nesbet's Liquor or Specific.**—See *C. & D.*, January 16, 1892, page 93; and also the issue of the week following.

250/45. *Chlorine.*—See the article on volumetric analysis in *C. & D.*, September 26, 1891. That will give you all the information you require for the Minor.

253/6. *Poorahnah.*—Hydrochloric acid is meant; it is often added to beef-tea. By the way, can't you compile a list of your pseudonyms? One is enough to go through life with, surely, but you must have scores in back numbers of the *C. & D.*

255/14. *Emulsion* writes from Holywell under several names, but none his own. That does not accord with our rules.

253/55. *Remo.*—The directions given for making granular preparations are quite right. It is you who are wrong in not following the details closely, and if you had better knowledge of the chemistry of the articles contained in the preparation, you would know that it is just at the point where the mass becomes sticky that it requires the closest attention to prevent burning.

253/49. *H. W.*—A highly-dried curd soap is what we have seen used as a starch-glaze such as you describe.

253/66. *N. Field.*—Shenstone's "Glass-blowing" (Longmans 1s. 6d.).

252/27. *G. M. D.* (Rotherhithe).—(1) The stuff is naphthalene, and can be bought at about 10s. to 15s. per cwt. (2) Kieselguhr may be obtained in small quantities through the leading wholesale houses.

252/6. *S. J. R.*—**Ammoniated Alcohol** is made by passing gaseous ammonia (obtained as in the B.P. liq. ammon. fort. method) into rectified spirit, keeping the latter as cool as possible.

253 54. *Students*.—We do not know of any practicable method.

241/39. *Subscriber* (Lancaster).—(1) Bald Patches on the Scalp, which arise from some parasitic skin-diseases, are exceedingly difficult to rouse into hair-growth. We take it from your query that the disease has been eradicated; if not, you must get it under by suitable treatment, such as the application of the following ointment:—

Ichthyol	..	..	..	..	5j.
Hydrag. oleat. 10-per-cent.	..	..	..	..	5ss.
Adipis lunc.	..	..	..	..	5ss.

M.

This to be applied morning and evening on lint, and covered with oiled silk.

After a week wash with Eichhoff's ichthyol-and-tar soap (made by Mühlens), allowing the lather to dry on the parts. This treatment with the soap is to continue for months, if necessary. We have found it to be exceedingly effectual in some cases. (2) The best book for chemists' use in counter-prescribing is THE CHEMISTS' AND DRUGGISTS' DIARY, 1893. You can supplement it by Begbie's "Medical Information" (Nelson, 2s. 6d.).

109 28. *A. J.*—Scotch Paregoric is tr. opii ammon. B.P.

242 59. *Xeres*.—We cannot imagine what the shepherd means by "fresh liquor" (similar to lard), unless it be carbolic ointment. There are three references to white liniment in our last volume, which please consult.

242/23. *Ozone*.—It is not an English publication.

242/24. *Veritas*.—See reply 241/39.

243 27. *G. B. Wright*.—See reply to another correspondent on the same subject.

239 38. *G. D.* (New York).—The copy has been sent to you. You will note that the English pint indicated in the formula is 20 oz., not your American 16-oz. pint.

240 8. *A. Brown* has been told that the proper way to make Liquor Arsenicalis is to boil it in an enamelled pan. That, of course, is nonsense. The Pharmacopœia says:—"Place the arsenious acid and the carbonate of potassium in a flask, with 10 oz. of water, and apply heat," &c. No doubt, on the large scale, the solution is made in enamelled pans, and we presume that the manufacturers assure themselves that the enamel is free from arsenic.

107 37. *Chemist*.—(1) Soothing Syrup without Opium:—

Potassii bromidi	..	..	..	5j.
Potassii bicarbonatis	..	..	..	5iss.
Oil. anisi	..	..	..	℥xij.
Spt. chloroformi	..	..	..	5ss.
Tinct. anrantii	..	..	..	5iij.
Syrup. ad	..	..	..	5x.

Dissolve the salts in $\frac{1}{2}$ oz. of water, and add to 8 oz. of syrup. Then dissolve the oil in the spirit, add the tincture, and mix with the syrup. Make up to 10 oz. with syrup.

The dose of this preparation is a half to a whole teaspoonful with a little warm water. (2) Soothing or Teething Powders.—See *C. & D.* July 30, 1892, page 192. (3) Cough-mixtures. See article in *C. & D.*, Dec. 3, 1892, page 810. Mixture A is excellent; you may use tincture of senega in place of quillina; also add 1 oz. of syrup.

244/13. *R. F. W.*—We cannot understand your criticism. Reporters of trade journals are admitted to the meetings of

the Pharmaceutical Council. District representation has been warmly advocated lately by Mr Thompson, President of the Midland Counties Chemists' Association.

246 53. *Pax* (Paris).—Before we could advise you as to the utilisation of the nitrous-oxide vapours, we should require to know what quantity you are dealing with, and whether you can employ the product on the spot.

Next Week.

Meetings, &c., to be held, and business to be transacted thereat. Suitable notices will be inserted in this section if received by the Editor on or before Wednesday.

MONDAY, March 13.—*Society of Arts*, at 5 P.M. Professor W. Chandler Roberts-Austen's Second Cantor Lecture on "Alloys."

TUESDAY, March 14.—*Royal Institution*, at 3 P.M. Professor Victor Horsley on "Physic and Psychical Neurology."

WEDNESDAY, March 15.—*Liverpool Chemists' Association*. Annual dinner at the Adelphi Hotel, at 7.15 P.M. for 7.30 prompt.

WEDNESDAY, March 15.—*Royal Microscopical Society*, at 8 P.M. Dr. G. M. Giles on "Cystic Worms Simulating the Appearance of Tuberculosis." Dr. A. Stokes on "New Brackish Water from the United States." Surgeon V. G. Thorpe on "Rotifer of China."

WEDNESDAY, March 15.—*Society of Arts*, at 8 P.M. "Technical Education: Its Progress and Prospects," by Sir Philip Magnus.

WEDNESDAY, March 15.—*Western Chemists' Association*. Smoking-concert at the Westbourne Restaurant, 1 Craven Road, W., at 8.30 P.M.

WEDNESDAY, March 15.—*Brighton Junior Association of Pharmacy*, 2 Silwood Terrace, Silwood Road. Mr. Giebler on "Explosives."

WEDNESDAY, March 15.—*Pharmaceutical Society, North British Branch, Edinburgh*, at 8.30 P.M. Proceedings: "Observations on Decomposing Chloroform," by David Brown, F.C.S. "The Cause of Crystallisation in Easton's Syrup, B.P.C.," by William Lyon.

THURSDAY, March 16.—*Liverpool Chemists' Association*. At the Royal Institution a general meeting will be held. Mr. T. S. Wokes will give a paper on "What is our Duty to the Pharmaceutical Society?"

THURSDAY, March 16.—*City School of Pharmacy*. Smoking-concert and presentation of certificates at Courts Restaurant, Temple Bar.

THURSDAY, March 16.—*Chemists' Assistants' Association*, 103 Great Russell Street, W.C., at 9 P.M. Short papers.

THURSDAY, March 16.—*Dundee Chemists', Assistants', and Apprentices' Association*, at 9.15 P.M. Short papers.

THURSDAY, March 16.—*Royal Society*. Professor Virehow will deliver the Croonian lecture at 4 P.M. Subject: "The Position of Pathology among the Biological Sciences."

THURSDAY, March 16.—*Chemical Society*, at 8 P.M. "Limits of Accuracy of Gold-bullion Assay, and the Losses of Gold Incidental to it," by T. K. Rose. "Boiling-point of Liquid Nitrous Oxide at Atmospheric Pressure, and on the Melting-point of Solid Nitrous Oxide," by W. Ramsay, F.R.S., and John Shields, Ph.D. "Isomerism of Aliphatic Aldoximes," by W. R. Dunstan and T. Dymond. "Formic Aldoxime," by W. R. Dunstan. "Properties of Alpha-benzaldoxime," by W. R. Dunstan and C. M. Luxmore.

FRIDAY, March 17.—*Royal Institution*, at 9 P.M. Dr. W. J. Russell, F.R.S., on "Ancient Egyptian Pigments."

SATURDAY, March 18.—*Royal Institution*, at 3 P.M. Lord Rayleigh on "Sound and Vibrations."

THE NEW DRUGGIST'S LABEL CABINET

(PATENTED).



H. POTHS & CO., 4 CREECHURCH LANE, LONDON, E.C.
LEADENHALL ST.,
Full Particulars on Application. [2]

CRYSTAL PALACE JOHN BONDS GOLD MEDAL MARKING INK

Sale ever increasing at Home and Abroad, showing the appreciation by Trade and Public of this original and genuine Preparation.

GIVEN AWAY

And enclosed with every 6d. and 1s. Bottle and every 6d. and 1s. Marking Ink Pencil, a voucher entitling Purchasers to their Patent 18-carat gold-faced Rubber Stamp. Name in full or Monogram, for Marking Linen or Paper.

WHOLESALE and EXPORT DEPOT:—75 SOUTHGATE ROAD, LONDON, N.

Send for Illustrated Price Lists and Samples for Travellers and Showrooms.

LARGEST SALE OF ANY MARKING INK IN THE WORLD.

KEENE & ASHWELL, 74 New Bond Street, LONDON.

SEND FOR SPECIAL TERMS.

1s. Size

(Large Bottles)

CAMPBOR PILULES

3/6 Doz.

And ALL 1/- HOMŒOPATHIC MEDICINES

MARCH WINDS.

IN health the skin has a bloom upon it like the velvety down on a peach. Strong soaps wash this all away, and dry and harden the tissue. If the skin is strong, it can stand strong soaps; if sensitive, it cannot. "**VINOLIA**" SOAP is considered by the Medical Profession generally as the **Purest, Safest, Best.** We supply a list of exhaustive scientific tests, free on application. "**VINOLIA**" SOAP will stand these, or we should not supply them. Other soaps will not stand them.

Therefore use "**Vinolia.**"

T. & H. SMITH & Co.

MANUFACTURERS OF

MORPHINE AND ITS SALTS.

In powder and crystals.

MORPHINE TARTRATE.Introduced by us and specially prepared for
hygrodermic treatment.**CODEINE AND ITS SALTS.****APOMORPHINE MURIATE.****CAPSICINE.****CINGERINE.****JALAP RESIN.****ALOIN.****SCAMMONY RESIN.****JALAPINE.****SALICIN.****CHLOROFORM PURE.****CHLOROFORM METH.**Our brand has been for many years known
the Wholesale Trade as absolutely pure.**ERGOTINE.****CANTHARIDINE.**Inventors and Sole Manufacturers of the **TELA VESICATORIA** or Blistering Tissue.

By far the most efficient Cantharides Vesicant in existence.

EDINBURGH Address—21 Duke Street.**LONDON** Address—12 Worship Street, E.C.**NEW YORK** Office—20 Cedar Street.**DILLON & CO., Agents.**

FOR PRINTED REPORT, SAMPLES, AND PRICES, PLEASE APPLY TO

B. KÜHN, 36 St. Mary-at-Hill, LONDON,

SOLE AGENT FOR THE UNITED KINGDOM AND EXPORT.

The Salicylic Acid was
found free from Creosotic, and melting at
156°C. (314.2 Fahrenheit).
See Analytical Report.**SALOL,****SALICYLIC ACID,****SALICYLATE OF SODA.**The Salicylate of Soda
was found to have
the same degree of
purity as the Acid.
See Analytical Report.

MANUFACTURED BY

KNOLL & CO., Ludwigshafen a/ Rhein.

STOCK KEPT IN LONDON.

SPECIALITIES.Castor Oil.
Almond Oil.
Olive Oil.
Cod-liver Oil.
Acetic Acid.
Tartaric Acid.
Phosphoric Acid.
Salicylic Acid.Camphor.
Glycerine.
Lithia Salts.
Tartar Emetic.
Castile Soap.
Pepsin, P.B.Albumen.
Herbs & Extracts.
Insect Powder.
Mercurials.
Camomiles.Ess. of Lemon.
Gums. Perfumes.
American Cotton Oil, etc.

COMMISSION MERCHANTS.

IMPORTERS-EXPORTERS.

FUERST**BROS.**

LONDON, E.C., 17 Philpot Lane; and NEW YORK, 2 & 4 Stone Street.

SAMPLES
AND PRICES
ON APPLICATION.We only supply goods direct from
Manufacturers personally known to ourselves.
We can consequently vouch for the purity of the
articles we sell.

CORRESPONDENCE SOLICITED.

LOFTHOUSE & SALTMER,

MANUFACTURING CHEMISTS, WHOLESALE & EXPORT DRUG MERCHANTS, HULL,

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles. Quotations on application.
DEALERS IN PURE CHEMICALS for Medicinal, Photographic, and Commercial purposes.Importers of Cod Liver, Castor,
and Olive Oils; Extra Super
Essence of Lemon and Berga-
mot, Otto de Rose, and allEssential Oils; Valentia Saf-
ron; Vanillas; Fruit Essences;
Carmine, Aniline Dyes; Bees'
Wax, &c., &c.MANUFACTURERS of Very Superior Flexible Gelatine Capsules of Balsam Copaiba, Cascara Sigrada, Castor Oil, Cod-liver
Oil, Santal Oil, &c. Samples and Lowest Quotations per 1,000, or in Boxes for Retail, will be sent on application for either
the Wholesale or Retail Trade.

THOMAS TYRER & CO.

STIRLING CHEMICAL WORKS. ESTABLISHED 1844.

STRATFORD, LONDON,
GUARANTEE ALL THEIR PREPARATIONS FOR
PHARMACY, PHOTOGRAPHY & ANALYSIS

SPECIALITIES— **ACID** **PHOSPHORIC** — **1.750** **HYPOPHOSPHITES.** — **1.500**

FREE ARSENIC, LEAD, LIME, SULPHUR, &c. Also

THE
Heidelberg Gelatine Works,
STOESS & CO.
Ziegelhausen,
near
HEIDELBERG.

OF ALL
KINDS AND
DESCRIPTIONS

GELATINES

SPECIALITIES:
The Finest & Purest Qualities for Culinary, Domestic, and Technical purposes.

STOESS' IMPROVED GELATINE for EMULSIONS.

SOLE AGENT—MR. FREDK. BOEHM,
4 Cullum St., LONDON, E.C.

STOCK KEPT IN LONDON.

J. ROBBINS & CO. **OXFORD ST. 147**

METHYLENE
Obtained by the action of Metallic Zinc on Chloroform and Alcohol.
Discovered to be a general Anæsthetic by Dr. RICHARDSON in 1867.

1-lb. Stopped Bottle, 1s.; 4-lb., 6s. 6d.; 4-oz., 3s. 6d.; 2-oz., 2s.
COMPOUND ANÆSTHETIC ETHER,
For producing Local Anæsthesia.
In 4-oz., 10-oz., and 20-oz. Stopped Bottles, 2s., 4s., and 7s.

OTONIC ETHER,
In 2-oz., 4-oz., 8-oz., and 16-oz. Stopped Bottles, 2s., 3s. 6d., 7s., and 12s.

PEROXIDE OF HYDROGEN,
First introduced as a Medicine by Dr. RICHARDSON.

ETHYLATE OF SODIUM
(Dr. Richardson's Formula, for removing Nævi, &c.) In 1-oz. & 1-oz. Bottles, with elongated stoppers for applying the Caustic, 2s. 6d. & 4s.

STYPTIC COLLOID.
For promoting the Healing of Wounds by the first intention.
In 2-oz. and 4-oz. Bottles, with Brush, 2s. 6d. and 4s. 6d.; 16-oz., 12s.

CHARCOAL CAPSULES,
Containing Pure Vegetable Ivory Charcoal.
In Boxes, 2s. 6d. each.

G. R. HARKER, STAGG & MORGANWHOLESALE & EXPORT
DRUGGISTS,

Manufacturing Chemists,

PROPRIETORS OF

FIELD'S SELECT PREPARATIONS

15 Laurence Pountney Lane

AND

Arthur Street West,
LONDON, E.C.

Saline.

Liquid Extracts.

Glycerine and

Cucumber.

Concentrated

Waters.

Liq. Papain et Iridin Co.

Liq. Eucalypti et Sassafras Co.

Liq. Pepticus.

Liq. Santal c. Buchu et
Cubeba.Liq. Copaibæ c. Buchu, Cubeba,
et Matico.

TELEGRAPHIC ADDRESS: "EDULCINE."

Edulcine.

Chloroform.

Concentrated

Liquors.

Concentrated

Infusions.

Liq. Eucalypti et Sassafras Co.

Liq. Santal c. Buchu et
Cubeba.

HUBBUCK'S PURE OXIDE OF ZINC

THROUGH THE CHIEF WHOLESALE HOUSES.

THOMAS HUBBUCK & SON, LIM^d

(ESTABLISHED 1765),

24 . LIME STREET, LONDON, E.C.

C. F. BOEHRINGER & SOEHNE,
WALDHOF, NEAR MANNHEIM,

MANUFACTURERS OF

SULPHATE OF QUININE, B. and S. Brand, and all other Cinchona preparations, also of ACETANILID, CAFFEINE, COCAINE, CHLORALHYDRAT, CUMARIN, GALLIC ACID, GLYCERINE, HELIOTROPIN, SALICYLIC ACID and SALICYLATES, STRYCHNINE, TERPIN HYDRAT, &c.
STOCKS KEPT IN LONDON, GLASGOW, AND DUBLIN.

AGENTS. — LONDON: Messrs. DOMEIER & CO., 13 St. Mary-at-Hill, E.C.
" — GLASGOW: " F. R. MUELLER & CO., 47 Waterloo Street.
" — DUBLIN: Mr. JOS. LECKY, 26 Eustace Street.

DUNCAN, FLOCKHART & CO.

Wholesale and Export Druggists,

EDINBURGH.

CHLOROFORM

(DUNCAN'S).

PREPARED FROM PURE AND METHYLATED SPIRIT.

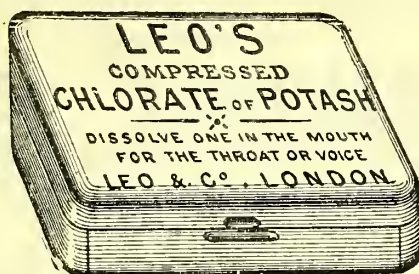
Also CHLOROFORM (BLUE LABEL).

Put up in all sizes of bottles. A strap with Name and Trade Mark of the Firm is placed over the stopper of each bottle. For Export, in stoppered bottles, securely luted, and in hermetically sealed flasks when required.

N.B.—We guarantee all the above CHLOROFORMS to be PURE CHLOROFORM, answering all the tests of the British Pharmacopœia.

Ammon. Brom.
Ammon. Chlor.
Antifebrin
Antipyrin
Bismuth Subnit.
Chloralamid
Ipecac. Powd.
Ipecac. & Opium
Pepsine, B.P.
Phenacetin
Potass. Bicarb.
Potass. Brom.

When
ordering
specify
LEO'S.



They are
supplied by
all the
Wholesale
Houses.

Potass. Iodide
Quinine
Salol
Salicin
Soda Bicarb.
Soda Mint
Soda Salicylate
Sulphonal
Sulphur Compound
Urethane
Voice (Potass. Chlor.,
Borax and Glycerine)

COMPRESSED CHLORATE of POTASH. CHLORATE OF POTASH & BORAX.

Quotations given for large and small quantities.

121

LEO & CO.

8 CREECHURCH LANE, LONDON, E.C.

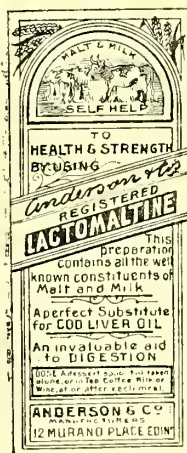
ANDERSON & CO.

TRY OUR

EXT. CASCARÆ SAGRADÆ LIQ.
LIQ. SENNÆ DULC., 1 in 1.

SYR. HYPOPHOSPH. CO.

AND COMPARE.



TRY OUR

EXTRACT of MALT.
EXT. MALT with COD LIVER OIL
CHLORODYNE INSEPARABLE.

AND COMPARE.

12 MURANO PLACE, EDINBURGH.

R. W. GREEFF & CO., 29 MINCING LANE,
AGENTS FOR

J. D. RIEDEL, BERLIN.

SPECIALITIES.

**SULFONAL-RIEDEL,
PHENACETIN-RIEDEL,
THIOL-RIEDEL,
PEPSIN-RIEDEL,
CHLORALHYDRATE-RIEDEL,
AND
SALIPYRIN-RIEDEL.**

SALIPYRIN-RIEDEL is sold Wholesale by Messrs. ALLEN & HANBURYS, Plough Court,
Lombard Street, E.C.

DR. HENRY BYK'S PURE CHEMICALS.

ACID. PYROGALLIC BISUB.

Professor Dr. Vogel says:—" . . . light snowy white and carefully prepared article—DISSOLVING COMPLETELY and quickly in water or alcohol."

Professor Dr. J. M. Eder says:—"Dr. Byk's Pyrogallio Acid is exceedingly light and bulky . . . as good an Acid as can be produced."

This is the lightest, and consequently purest, Pyro in the trade.

AMMONIUM BROMIDE.

GOLD CHLORIDE.

HYDROQUINONE.

**DR. BYK'S PERMANENT HYDRO-
QUINONE.** Light yellow crystals.
PATENT. Insoluble to moist air and light.

SODIUM BROMIDE.

ACID. BENZOIC. E RESINA.

Guaranteed to be sublimed from and retaining the fragrance of Gm. Benjamin.

ACID. CALLIC. CRYST. CHEM. PURE.

Perfectly white needles.

ACID. TANNIC.

Purest quality, powdered and granulated. Dissolves colourless in water, alcohol, and ether, free from resinous and colouring matter. For medicine and finest work in art.

ACID. TANNIC LEVISSIMA PUREST.

Dissolves colourless in water, alcohol, and ether, free from resinous and colouring matter. Used for similar purposes as the chemically-pure powder.

IODOFORM CRYSTALS.

POTASH BROMIDE CRYST.

POTASH IODIDE CRYST.

RENNET POWDER.

SODIUM BENZOATE.

SODIUM IODIDE.

BISMUTH SALICYLATE.

STRONTIUM BROMATE.

SALICYLIC ACID AND

SALICYLATE OF SODA.

Chemically and Physiologically Pure.

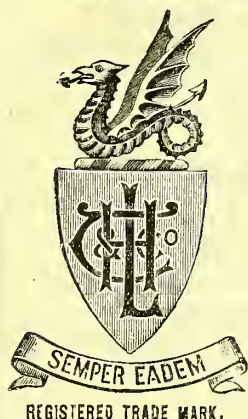
SOLE WHOLESALE AGENTS:

R. W. GREEFF & CO., 29 Mincing Lane, **LONDON, E.C.**

GRANULAR

EFFERVESCENT

PREPARATIONS.



Our manufacture of the above having given great satisfaction last year, we are already booking orders for present and forward delivery, and advise early application. We beg to submit the following prices:—

				In Bottles, 1 lb. and upwards.		In 28 lb. Tins.
CITRATE OF MAGNESIA.	Quality			per lb.		per cwt.
	A,	<i>very superior</i>	...	1/6		130/-
"	B,	<i>superior</i>	...	1/-	"	75/-
"	C,	<i>usual quality</i>	...	10d.	"	70/-
"	D,	<i>good saleable</i>	...	9d.	"	65/-
"		Raspberry Flavour, tinted	...	1/2	"	80/-
"		Lime Fruit Flavour	...	1/2	"	80/-
"		Lemon Flavour	...	1/2	"	80/-

Special quotations to large buyers.

CITRATE OF MAGNESIA, in 6-oz. Bottles with Boxwood Top Corks or Patent Stoppers, 36/- per gross net.

FREE SAMPLES ON APPLICATION.

T. HOWARD LLOYD & CO.

Wholesale and Manufacturing Chemists,

86 High Street and Town Hall Lane, LEICESTER.

Schacht's Preparations.

SCHACHT'S LIQUOR BISMUTHI.

Absolutely pure. The original preparation, invented and introduced to medicine by Mr. Schacht in 1855. Its distinct superiority is universally admitted. In $\frac{1}{2}$ lb., 1 lb., 2 lb., and 5 lb. bottles. Dose: 1 drachm diluted. When ordering, please to specify "SCHACHT'S."

SCHACHT'S LIQ. BISMUTHI SEDATIVUS.

Contains pure Bismuth and *Pepsina Liquida* in combination with sedatives. A formula most serviceable in the treatment of gastric pain. In 4 oz., $\frac{1}{2}$ lb., and 1 lb. bottles.

SCHACHT'S SYR. CINCHONÆ ALCOHOLICUS.

A standard preparation, of definite alkaloidal strength, containing the entire medicinal properties of the finest Cinchona Bark. It is, in fact, *Bark minus the woody fibre*, and its efficiency has been proved by careful medical enquiry. Dose: Ten to sixty drops.

SCHACHT'S PEPSINA LIQUIDA (REGISTERED TITLE).

Fluid pepsine of extraordinary activity—tasteless, odourless, attractive to patients, and reasonable in price. Every teaspoonful when tested by the official B.P. process is guaranteed to effect the solution of 1,000 grains of albumen. Peptic power is the only test of value. Most of the fetid and repulsive dry Pepsines have proved worthless. In 4 oz. bottles, 2½, 8½, each; and larger sizes for dispensing at a cheap rate.

SCHACHT'S PEPSINA LIQUIDA C. BISMUTHO.

Each drachm contains in a concentrated form, besides the fluid pepsine a full dose of Schacht's Liquor Bismuthi. Dose: One drachm, in $\frac{1}{2}$ lb. and 1 lb. bottles.

N.B.—*Peps. Liq. c. Bismutho Co.* contains, in addition, *one gr. soluble Euonymin* in each drachm.

SCHACHT'S PEPSINA LIQUIDA C. EUONYMIN.

Each drachm contains one grain of soluble Euonymin. Dose: One drachm. For dispensing $\frac{1}{2}$ lb. and 1 lb. bottles.

SCHACHT'S LIQ. PODOPHYLLI C. BISMUTHO.

A perfect solution of Podophyllin, containing $\frac{1}{2}$ gr. in each drachm.

SCHACHT'S LIQUOR CASCARÆ DULCIS.

A pleasant and active form of *Cascara Sagrada*. Dose: One to three teaspoonfuls diluted. In 4 oz., $\frac{1}{2}$ lb. and 1 lb. bottles.

SCHACHT'S INFALLIBLE RENNET.

An entirely new Essence, perfectly reliable, for the coagulation of Milk, and the production of Junkets and Curds and Whey. It is a preparation of the most wholesome nature, that contains no salt, and has no special taste, smell, or colour. In large bottles at 1s. of any Chemists. This Essence keeps well in any climate.

The above Preparations can be procured from Messrs. Barclay & Sons, W. Edwards & Son, and the Wholesale Druggists, or direct by post from

GILES, SCHACHT & Co., Clifton, Bristol.

PEPSALIA.

The New Improved and Perfected Style. White and Odourless.

Guaranteed to keep good indefinitely in all climates.

1/- size ...	...	...	...	Per dozen, 10/-	...	...	...	Per gross, 105/- net.
2/- " ...	...	...	...	" 20/-	...	...	...	" 210/- "
5/- " ...	...	...	...	" 50/-	...	...	...	" 525/- "

PUMILINE.

Essence 1/6 ...	...	Per dozen, 15/-, less 10 per cent.	Liniment 1/9 ...	...	Per dozen, 20/-, less 10 per cent.
" 2/6 ...	...	" 24/- " 10 "	Jujubes 1/1 ...	...	" 10/6 " 5 "
Extract 1/- ...	...	" 9/- " 10 "	" 2/3 ...	...	" 20/- " 5 "
Ointment 1/1½ ...	...	" 11/- " 10 "	Dry Inhalers, complete 1/6	...	" 14/- " 10 "
" 2/9 ...	...	" 27/- " 10 "			

G. & G. STERN, 62 Gray's Inn Road, LONDON, W.C.

SMITH & SONS

WHOLESALE DRUGGISTS AND MANUFACTURING CHEMISTS,
44, 46, and 48 MAGDALEN STREET, NORWICH.

PURE CHEMICALS.

MANUFACTURERS

PHARMACEUTICAL

IMPORTERS OF ESS. LIMONIS



NEW REMEDIES.

OF ALL

PREPARATIONS.

SUPER AND ALL ESSENTIAL OILS,

CRUDE DRUGS AND CHEMICALS.

DEALERS IN DRUGGISTS' SUNDRIES AND SURGICAL APPLIANCES.

PRICES CURRENT ON APPLICATION.

TELEGRAMS—"SMITH NORWICH."

ABSOLUTE NECESSITIES

IN THE MANUFACTURE OF

PILLS.

PURITY OF INGREDIENTS.

This we ensure by importing our own Drugs, manipulating them in our own Laboratories by special processes, and with the aid of the latest and best machinery; grinding, crushing, and mixing them in our own Drug Mills, and by the strictest care in the selection of all purchases.

SCIENTIFIC MANIPULATION.

Every department is under the immediate supervision of scientific men well skilled in their business and of great experience, the whole being constantly under the immediate personal supervision of the principals. The process of manufacture is thereby ensured to be scientifically carried out, and the proper therapeutic effect of each individual combination thoroughly maintained.

SOLUBILITY AND PERMANENCE.

These features have been so frequently attested by clients in every quarter of the globe that repetition is altogether unnecessary.

WE ARE THE LARGEST MAKERS IN THE WORLD.

WE HAVE HAD ELEVEN GOLD MEDALS AWARDED.

JOHN RICHARDSON & Co., LEICESTER, L^{TD}.

ESTABD. A.D. 1793.

INCORPD. 1891.

B. KÜHN, 36, LONDON

St. Mary-at-Hill,

PAPAIN

(DR. FINKLER & CO.)

A purely vegetable ferment, which combines digestive, tonic, and antiseptic action. It is superior to Pepsin and Pancreatin, as it digests and peptonises albumen in acid, alkaline, and neutral media. (See opinion of Medical Press.)

PAPAIN PEPTONE

Albumen of fresh Beef predigested by Papain. It is the most concentrated form of Peptone. It contains 92.42 % albumen in the form of Peptone and Albumose. (See *Lancet*, April 4, 1891, p. 781.)

EXALGINE

(BRIGONNET).

The most efficient analgesic. Relieves pain in Neuralgia of all kinds—Sciatica, Lumbago, Locomotor Ataxy, Chorea, Cephalalgia, and Rachialgia in Influenza, &c. (See published reports by Professors Frazer and Dujardin-Beaumetz, and other authorities.)

SALICYLIC ACID, SALOL, SALICYLATES

(KNOLL & CO.)

The products of Messrs. Knoll & Co., Ludwigshafen, are well known for their purity, uniformity, and superiority of manufacture generally. The Salicylic Acid was found free from creosotic and melting at 156 Centig. (314.2 Fahrenheit). The Salicylate of Soda was found to have the same degree of purity. (See published Analytical Report.)

ETHYL CHLORIDE

(DR. BENGUÉ).

With Patent Stopper and Spray. The most convenient, economic and handy form of producing local anæsthesia for dental or minor operations; also as a remedy for relieving pain in Neuralgia, Migraine, &c. (See Pamphlet.)

Samples, Pamphlets, published Reports of the Medical Press, &c., sent free on application.

SOLD BY ALL WHOLESALE DRUG HOUSES, OR DIRECT BY B. KÜHN, 36 ST. MARY-AT-HILL, LONDON
(IN WHOLESALE QUANTITIES ONLY).

WILLIAM BURTON & SONS, BETHNAL GREEN, LONDON.

Hydrogen Peroxide, Indigo Extract, Soluble Indigo Powder, Orchil, Cudbear, Logwood Extract, Fustic Extract, Aniline Dyes, Fine Lakes for Lithographic Inks, Vermilionettes, Drysalteries.

Sole Agents in United Kingdom and Colonies, excepting Canada, for

The New Bleach, **SODIUM PEROXIDE** (Aluminium Co., Ltd.).

CLAY'S PEARL-COATED TASTELESS PILLS.

Special Quotations to buyers of 10-gross lots. Cash with order, tins free, carriage paid. All our Pills are most carefully prepared from the purest and most active ingredients, and are warranted true to description.

PILLS OF THE BRITISH PHARMACOPEIA.

Per gross.	Per gross.	Per gross.
8 Pil. Aloes Barb. - 6	5 Pil. Asafetide Co. - 6	8 Pil. Ferri Carb. - 6
" " et Antacidis - 6	6 " Coloc. Co. - 10½	9 " Hydrarg. - 6
" " et Ferri - 6	7 " Coloc. et Hyos. 1/1	11 " Rhei Co. - 9

NON-OFFICIAL FORMULA

Per gross.	Per gross.	Per gross.	Per 1,000
98 ANTIBILIOUS	115 As 111, with 1 gr. Calomel	303 DANDELION, CHAMOMILE, and RHUBARB	140 LITTLE LIVER
Ext. Coloc. Co., 1 gr.	116 " " 1 gr.	Ext. Turis, 1 gr.	Aloin, 1-10 gr.
" Hyoscy., 1 gr.	117 " " 1 gr.	Anthem., 1 gr.	Jalapin, 1-10 gr.
Pil. Hydrarg., 1 gr.	135 CASTOR OIL	P. Rhei, 1 gr.	Podophyllin, 1-5 gr.
Pulv. Ipecac., 1 gr.	P. Saponis, 1 gr.	" Aloes Barb., 1 gr.	Ext. Hyoscy., 1-20 gr.
99 ANTIBILIOUS with PODO-	P. Saponis, 1 gr.	Zingib., 1 gr.	" Nucis Vomic., 1-20 gr.
PHYLLIN (VEGETABLE ANTIBILIOUS)	Oil. Mchcl., 1 gr.	Oil. Carui.	Ol. Resin. Capsici, 1-20 gr.
Podophyllin, 1 gr.	" Crotonis, 1-16 gr.	304 DINNER and DIGESTIVE	
Pil. Rhei Co., 1 gr.	116 COCHLEA CO., 4 and 5 gr.	Aloes Socot. Ext., 1 gr.	305 NEURALGIA and TIC
Ext. Hyoscy., 1 gr.	P. Aloes Cape, 2 gr.	Pil. Rhei Co., 1 gr.	Quinina Sulph.
" Tarax., 1 gr.	" Gambogin, 1 gr.	Ext. Gentian., 2 gr.	Ferri Sulph., aa 1 gr.
100 ANTIBILIOUS	" Jalape., 1 gr.	173A FEMALE	Ext. Belladon., 1 gr.
Ext. Coloc. Co., 1 gr.	" Saponis, 1 gr.	Aloes Barb., 1 gr.	" Colchici Acet., 1 gr.
" Hyoscy., 1 gr.	Zingib., 1 gr.	Ferri Sulph. Exsic., 1 gr.	" Hyoscy.
Pil. Hydrarg., 1 gr.	Oil. Caryoph., 1 m.	Ext. Hellebore, 1 gr.	Camphora, aa 1 gr.
Hyd. Subchlor., 1 gr.	184A COTTON	P. Myrrhie, 1 gr.	58 STEEL and PENNYROYAL
14 APERIENT	P. Ipecac. Co., 1 gr.	Aloes Socot., 1 gr.	Pil. Aloes et Ferri, 4 gr.
Pulv. Gambogin, 1 gr.	" Gum. ammoniac., 1 gr.	Ext. Hellebore, 1 gr.	Ol. Pulegii, 1 gr.
" Aloes Barb., 1 gr.	Sellin, 1 gr.	189A GOUT and RHEUMATIC	
" Colocynthis, 1 gr.	Sapo. Hypan., 1 gr.	Ext. Colchici, 1 gr.	145 TONIC
" Jalape., 1 gr.	302 DANDELION and RHUBARB.	Ammon. Carb., 1 gr.	Cinchonidine Sulph., 1 gr.
" Saponis, 1 gr.	Ext. Tarax.	Guaiaci Resin., 1 gr.	P. Aloes Socot., 1 gr.
" Gingerina, 1 gr.	Pil. Rhei Co., aa gr. ii.	P. Opil., 1 gr.	Ferri Sulph. Exsic., 1 gr.
80 BLAD'S			Pulv. Nucis Vomic., 1 gr.

Coated Pills of all descriptions made to order. Price on application.

CLAY, DOD & CO., Wholesale Druggists, 52 ST. ANNE STREET, LIVERPOOL.

ADDRESS TO THE TRADE.

Registered under the Trade Marks Act.

DR. WILLIAMS'

**PINK
PILLS
FOR
PALE
PEOPLE**

MEDICINE Co.'s

GREAT

Blood Builder and Nerve Tonic.

The above article has, by the extensive advertising used in connection with it, acquired a larger sale than any other proprietary medicine in Canada; and advertising on the same scale and plan has just been commenced in this country, a large contract having been already made for advertising in one or more newspapers in each of the chief towns in the Midland counties. It is intended to extend this system to all parts of the country, and arrangements are being made on a lavish scale for the furtherance of all departments of the business.

We have, therefore, every confidence in bringing it to your notice, and shall be glad to execute your orders, as you may have occasion for the goods (of which a price list will be sent to any Chemist on application), on favourable terms.

THE DR. WILLIAMS' MEDICINE CO.

(Care of JOHN MORGAN RICHARDS),

46 Holborn Viaduct, LONDON, E.C.

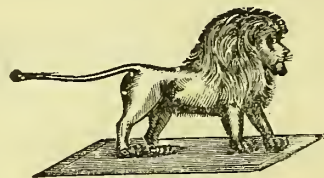
Examine your Stock. Every genuine Box and Bottle has the Lion Trade Mark on.



Facsimile of Ointment
and Pill Label.



REGISTERED



TRADE MARK.

BURGESS' LION OINTMENT, PILLS, & NERVE TONIC.

(Late Proprietor, E. BURGESS, of Holborn, W.C.)

The Proprietary Rights in the above Ointment, Pills, and Nerve Tonic, also goodwill of business, together with all Trade Marks, Registered at Home and Abroad, **HAVING BEEN PURCHASED BY ME OF THE SENIOR OFFICIAL RECEIVER, Mr. GEORGE WREFORD** (*he being Trustee to the Estate*), all ORDERS and communications should be sent to address at foot.

Notice is hereby given that all those infringing my rights, either by preparing or selling spurious Ointment, Pills, or Nerve Tonic, will be at once proceeded against.

H. J. DEACON, Chemist,
15 BROMLEY ROAD, BECKENHAM, KENT.

November 14, 1892.

CONTAINS NO POISON.

STORCROFT'S CURE.

In the worst cases of DIPHTHERIA, QUINSEY, and all DISEASES of the THROAT and CHEST, its effect is simply marvellous.

Wholesale Depot for London and South of England:—**MARCH & CO., 26 SOUTHWARK ST., S.E.**

W. SUTTON & CO.

76 CHISWELL STREET, late 10 Bow Churchyard, LONDON.

SOLE MAKERS OF THE

ORIGINAL BATEMAN'S DROPS & DAFFY'S ELIXIR.

Proprietary Medicines, Perfumery, Mineral Waters, Lozenges, Druggists' Sundries, and Miscellaneous Articles.

PRICE LIST FREE ON APPLICATION.

THE FINEST BOTTLES IN THE MARKET, WITH WORLD-WIDE REPUTATION, ARE
SPECIALITIES. BRANDED SPECIALITIES.

Best Dispensing Bottles in all Shapes, including Round-cornered, and any Fancy or other Shapes for Proprietary Articles.



REGISTERED TRADE MARK.

Hand-made Rounds, Opal, Flint, and Turquoise Boxes.

Every attention given to any coloured and special-shaped Bottles.

White Flint, Aqua-Marine, Bleu Céleste, Rich Dark & Pale Amber, Jet Black, Actinic Green, and all shades of Blue.

WHOLESALE ONLY.

"W" BRAND.

"W" BRAND.

"W" BRAND.

IMPORTANT NOTICE TO THE TRADE



ADVANCE IN PRICE.



DR. CHARLES ROOKE (LIMITED),

PROPRIETORS OF

DR. ROOKE'S CELEBRATED REMEDIES

BEG TO INFORM THE TRADE THAT

The Price of these Proprietaries WILL BE ADVANCED on and after the FIRST DAY OF APRIL NEXT.

PRICE LIST ON APPLICATION.

The attention of the Trade is also directed to the fact that

CROSBY'S BALSAMIC COUGH ELIXIR,

AS NOW MANUFACTURED,

DOES NOT CONTAIN POISON.

DR. CHARLES ROOKE (LIM.), SCARBOROUGH, ENGLAND.



SEQUAH'S OIL," (Read).

SEQUAH'S PRAIRIE FLOWER,

SEQUAH'S OIL,

AND

SEQUAH'S INSTANT RELIEF

Always give satisfaction.

SEQUAH, LIMITED, 46 HOLBORN VIADUCT, E.C.

TRADE MARK.



"SEQUAH INDIAN PRAIRIE FLOWER,"

REGISTERED

CLARKE'S

WORLD FAMED

BLOOD MIXTURE

THE GREAT

BLOOD PURIFIER.

CLARKE'S BLOOD MIXTURE is ENTIRELY FREE from any POISON or metallic impregnation, does not contain ANY INJURIOUS INGREDIENT, and is a good, safe, and useful medicine."

ALFRED SWAINE TAYLOR, M.D., F.R.S.
Lecturer on
Medical Jurisprudence and Toxicology.

Counter Bills and Posters, with Name and Address also Show Cards, on application. Printed matter supplied in any Language for Foreign Agents.

CAUTION.—Immediate proceedings will be taken against all persons pirating the Trade Mark, "Blood Mixture" (Registered No. 3,275), Labels, Wrappers, Bills, or Advertisements, or in any way infringing the rights of the Sole Proprietors,

THE LINCOLN & MIDLAND COUNTIES DRUG CO., LINCOLN, ENGLAND.

LUNGILI.

A New Drug for Dysentery and Diarrhœa.

This Drug was discovered a few years ago by Mr. A. H. G. Pigg, when exploring in Eastern Africa. It was originally obtained from a native Wise Man or Doctor, and was the cause of curing many obstinate cases of Dysentery. It consists of the powdered bark of a tree supposed to be hitherto unknown to science.

Testimonial from Mr. C. A. MOREING, M.Inst.C.E.,

BROAD STREET HOUSE, LONDON, E.C.

GENTLEMEN,—I have much pleasure in telling you that I have taken the "Lungili" you so kindly sent me, and it appears to have completely cured me. I have been suffering four years from Dysentery, the result of malarial fever caught in Africa, and no doctors were able to do me any permanent good by the ordinary remedies.

Yours truly,

C. ALGERNON MOREING.

THE "LUNGILI" COMPANY,

35 LUDCATE HILL, BIRMINGHAM;

or of Wholesale Druggists, EVANS, SONS & CO., Liverpool, and EVANS, LESCHER & WEBB, London.

A Book—Free.

This book opens up, in a simple yet graphic manner, the mysterious workings of nature in the human stomach.



You would not believe what delicate mechanism, what clocklike precision, what faultless processes are secretly and quietly in constant operation; how all these are set in motion by a bit of food entering the stomach.

Studying these things teaches us what to eat, what to avoid, and how to promote health. Those who suffer from weak stomachs or any form of dyspepsia should certainly read it.

We wish to send one copy to every Chemist in the kingdom. This book is full of interest, and will prove of use to anyone who will look it through. It clearly describes our preparation—Gay's Tonic—and shows by typical illustration the value of this remedy in cases of Indigestion, Sluggish Liver, and Nervousness. Please send name and address by Post-card to GUY'S TONIC CO., (New Offices) 6 SLOANE SQUARE, LONDON, S.W.

GROCERS

CANNOT COMPETE

WITH YOU!

SO

PUSH

GIVES

Immediate Relief in

COUGHS,
CONSUMPTION,
ASTHMA,
BRONCHITIS,
TIC,
SPASMS,
HYSTERIA, &c.

DIARRHŒA,
INFLUENZA,
CHOLERA,
CRAMP, AGUE,
SEA SICKNESS,

REVISED PRICE LIST.

		Retail.	Per doz.
Towle's Chlorodyne		1 1/2	0 8 6
Ditto		2 9	1 3 0
Ditto (3 fluid oz.)		4 6	1 16 0
Ditto (8)		11 0	4 13 0
Liq. Chlorodyni (original and only genuine)	1 lb.	2 6 each	For dispensing purposes.
Ditto ditto	1 lb.	4 6	
Ditto ditto	1 lb.	8 -	
Winchester Quarts (7 lb.), 7 6 per lb., bottles free.			
Chlorodyne Lozenges			2 6 per lb.
" Pastilles			

Labelled according to the Act.

WRITE FOR Showcards and Handbills.

A. P. TOWLE & SON, 75 Back Piccadilly, MANCHESTER.

CAUTION!

SPECIAL NOTICE TO THE TRADE

LION OINTMENT & PILLS.

DEACON v. BURGESS.

In the High Court of Justice, Chancery Division, on Saturday, December 17th, Mr. Justice Kekewich, in delivering judgment, said "that it will be sufficient, I think, and I am sure quite safe now to say that the plaintiff (Mr. H. J. Deacon), who certainly has not proved his knowledge of the genuineness, but who has clearly indicated his ignorance, and who is attempting to sell as genuine medicine that of which he is really ignorant." N.B.—A full report of the Judgment appeared in THE CHEMIST AND DRUGGIST, December 24 last.

CHEMISTS ARE PARTICULARLY REQUESTED TO ORDER

E. BURGESS, JUNR.'S, LION OINTMENT AND PILLS,

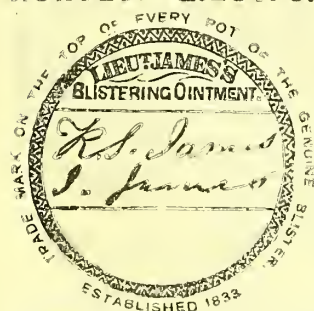
And to see that the Label bears Address,

59 GRAY'S INN ROAD, W.C.

As these are the ONLY GENUINE Goods, and this fact will be EXTENSIVELY ADVERTISED THROUGHOUT THE KINGDOM.

The Trade is respectfully requested to refer to the issues of "THE CHEMIST AND DRUGGIST" of December 10 and 17, and to read the Statutory Declaration made by E. Burgess, Junr., before the Lord Mayor of London. E. B., Junr., is the only person living with the knowledge of method of manufacture of these Remedies, and all statements to the contrary are untrue.

ESTABLISHED 1833.
HORSES.—LIEUT. JAMES'S BLISTER.



CAUTION.

The annexed Label is at the top of every Pot of the ORIGINAL and only GENUINE BLISTER.

The Messrs. Barclay & Sons, 95 Farringdon Street, London, and Messrs. Raimes & Co., Edinburgh, are now and have been Agents 57 years.

AGENTS:—Sutton & Co., 10 Bow Churchyard; W. Edwards & Son, 157 Queen Victoria Street; Newbery & Son, 37 Newgate Street; Evans, Lescher & Evans, Bartholomew Close; Burgoine, Burbridges & Co., 16 Coleman Street; Lynch & Co., 171A Alder-gate Street; Southall Brothers and Barclay, Birmingham; R. Heyden & Sons, 93 & 95 City Road, Finsbury; Sanger & Son, 150 Oxford Street; Millard & Sons, 40 Charterhouse Square; Corry & Soper, Shad Thames; A. A. Campbell Leadenhall Street, London; Woolley, Sons & Co., 59 Market Street, Manchester; Anothecaries Company, Virginia St., Glasgow; John Thompson, 58 Hanover Street, Liverpool; Bellamy & Co., 100 St. Paul Street, Dublin; McMaster & Co., 121 & 122 Capel Street, Dublin; T. McMullen & Co. and J. Clarke & Co. (Lim.), Belfast; D. Galbraith, Londonderry; M. C. Delacoe Pharmacie Anglaise, Bruxelles.

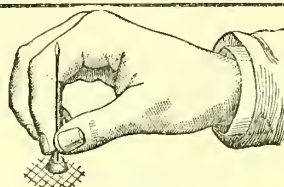
And by all Chemists, in Pots, 1/6, 2/9, 5/9, and 1/8.

COLONIAL AGENTS:—MELBOURNE and WELLINGTON: Felton, Grimwade & Co.; SYDNEY, BRISBANE, and LAUNCESTON: Elliott Bros & Co.; DUNEDIN and AUCKLAND: Kempthorne, Prosser & Co.; CALCUTTA: Smith, Stanistreet & Co.

W. H. JAMES, SOLE MANUFACTURER, FARINGDON, BERKS.

Advertised in "Bell's Life" 54 years. Beware of Spurious Imitations.

Trade Mark.



Registered.

THE

ASSOCIATION for the SUPPLY of PURE VACCINE Lymph
12x PALL MALL EAST, LONDON, S.W.

SOLE AGENTS FOR

DR. WARLOMONT'S CALF VACCINE

Tubes, 2s. each; Half Tubes, 1s. each. Pot made in vials, 5s.

HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes two-thirds full, 1s. 6d. each; Tubes one-third full, 1s. each; Tubes two-thirds full (same as those mentioned above, but without points), in quantities for export, 25 per 100 Tubes. Pre-points uncharged, 1s. per 100. Vaccine Ejectors, 1s. 3d. each, including postage. P.O.O.s (including postage, and crossed London and Westminster Bank) with orders payable to

EDWARD DAREL, Secrétaire

Office hours, 10 to 4. Saturdays 10 to 2.

SUPPORT HOME INDUSTRIES.



A.D. 1777.

BUY

KENT'S

BRUSHES.

See pp. 85-88, Winter Issue; also Diary, 1893, pp. 437-40.

STARTLING INNOVATIONS

IN THE

VARNISH TRADE.

SPLENDID QUALITY.

LOW PRICES.

ONE-GALLON CANS FREE.

SAMPLE BOARDS AND PARTICULARS ON APPLICATION TO

PINCHIN, JOHNSON & CO.

OIL, COLOUR, AND VARNISH MANUFACTURERS,

23 BILLITER STREET, LONDON, E.C.

Telegrams—"PINCHIN LONDON."

Telephone No. 2241.

PRIZE MEDAL,
International
Health Exhibition,
1884.

THE NEW PERMANENT

ENGRAVED WINDOW TABLETS

AWARD OF MERIT
International
Sanitary Exhibition,
1881.

IN RUBY, BLUE, AMBER, AND OPAL GLASS.

Send particulars of size, subject matter, and colour, when price for one Tablet and upwards will be sent.
For Proprietary Articles, 100 8x6 Ruby Tablets, £3 15s. 0d.

J. R. CORSAN, THE LONDON SAND-BLAST WORKS, 58a GRAY'S INN ROAD, W.C.
TO PREVENT FRAUD, DEMAND BUSINESS CARD FROM TRAVELLERS.

GENUINE EMERY, EMERY CLOTH, AND BLACK LEAD.

JOHN OAKLEY & SONS,

MANUFACTURERS OF

Glass and Flint Paper, Emery and Glass Cloth; Emery, Black Lead, Emery Wheels, Pumice, Putty Powder, Crocus, Urn Powder, Tripoli, Rouge, Plate Powder, Steel Polish, Furniture Polish, Knife Boards, Brunswick and Berlin Black, &c.

OAKLEY'S WELLINGTON KNIFE POLISH

Prepared expressly for Oakley's and other Knife Boards, Buff Leather Boards, and all the Patent Knife Cleaning Machines.
Sold in Canisters with perforated Tops to prevent waste, at 1d., 2d., 3d., 6d., 1s., 2s. 6d., and 4s. each.

OAKLEY'S NON-MERCURIAL SILVERSMITH'S SOAP,

For Cleaning and Polishing Silver, Plate Glass, Marble, &c. Tablets, 6d. each.

OAKLEY'S "POLYBRILLIANT" (REGISTERED).

A Magic Pomade for Cleaning Brass, Copper, Tin, Pewter, Britannia Metal, &c. Never becomes dry and hard like other Metal Paste.
Tins, 1d., 2d., 3d., and 6d. each.

WELLINGTON BLOCK BLACK LEAD,

In 1d., 2d., and 4d. Blocks, and 1s. Boxes.

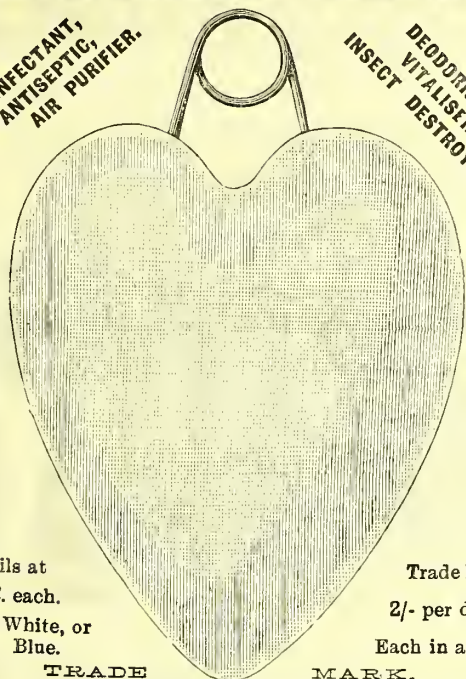
WELLINGTON EMERY & BLACK LEAD MILLS, Westminster Bridge Road, London, S.E.

Highest Award and Prize Medal, Philadelphia Exhibition, 1876; and Boston, 1883. Gold Medal, Crystal Palace, 1884.

THE CITY OF LONDON SANITARY HEART

DISINFECTANT,
ANTISEPTIC,
AIR PURIFIER.

DEODORISER,
VITALISER,
INSECT DESTROYER.



Retails at
3d. each.
Red, White, or
Blue.

Trade Price
2/- per doz.
Each in a box.

TRADE MARK.
Sole Proprietors and Manufacturers,

J. BEEDZLER & CO., "Ye Golden Key."
20 NORTON FOLGATE, E.C. Established 1700

GENUINE CARBOLIC ACID

Is now recognised as the Standard Disinfectant by the
RUSSIAN, GERMAN, BRITISH, INDIAN, and COLONIAL
GOVERNMENTS, after bacteriological tests against others.

CALVERT'S

No. 5 FLUID CARBOLIC

Is of the quality adopted as the Standard, and sold in 8 and 16 oz.
Ribbed Bottles, at 1/- and 1/6 each; 1/2, 1, and 1 gallon Tins, at 2/6, 4/-, and
6/6 each. Trade Lists and Counter Bills sent on application.

Traders should note that it is illegal to sell under the title "Carbolic Acid" any
Coal-tar preparation which does not contain the proportions of Carbolic
and Cresylic Acids specified in the Board of Trade regulations.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.
In each case the Highest Award when tested against other Disinfectants.

PARIS EXHIBITION, 1889.

PRIZE MEDAL AWARDED TO



"SALVO PETROLIA"

Absolutely Genuine Paraffinum Molle of the
very Purest Form, and we claim that it is
superior to Vaseline.

Manufactured by the Proprietors in Five distinct qualities—
WHITE, LEMON, YELLOW, GOLDEN, AND VETERINARY.
PACKED IN TINS, 1, 5, 10, 14, 28, 56, and 112 lbs. Also in 3-cwt. Casks.

"OLEUM DEELINÆ"

(REGISTERED).

Universally adopted by the Medical Profession for
**OPHTHALMIA, SCURVY, RINGWORM, ECZEMA,
AND ALL SKIN-DISEASES.**

For External and Internal Irritation of every kind.

PACKED IN CASES—

One Doz. 1s. 6d. Bottles; One Doz. 2s. 6d. Bottles.
Pint Bottles, 4s. 6d. each, for Hospitals and Dispensing
Chemists.

TESTIMONIALS MAY BE HAD UPON APPLICATION.

"Edible Salvo Petrolia"

For Public Speakers, Actors, and Singers.
1s. 6d. per Tube.

The above are Manufactured Solely by the Proprietors,

THE DEE OIL COMPY.
LIMITED.

Works—SALTNEY, CHESTER.

OFFICES—

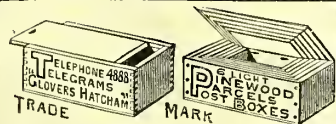
LONDON—38 LEADENHALL STREET, E.C.

Liverpool, Dublin, Manchester, Glasgow, Hull, Cardiff,
Bristol, Belfast, Barrow-in-Furness, Nottingham,
Paris, Hamburg, &c.

"A CAPITAL IDEA"!!

Said friend JONES, the GO-AHEAD CHEMIST. "I'VE DOUBLED
MY TRADE last year since I commenced packing all my
customers' prescriptions in Glover's small wood
boxes."

And JONES CHUCKLED!!



PRICE 14/-
per doz. nests of 6
Boxes, planed and hinged,
from 5' x 2 1/2' x 1 1/4' to
9 1/4' x 6 1/4' x 4 1/4'. Nests of 6 for Bottles,
4 oz. to 16 oz., at same price. Single nest, 1/6.
Special Terms for Large Quantities to Shippers.

"CAPITAL, INDEED"!!!

Said the Colonial Shipper. "Those light nested
boxes, shipped in cases (each containing 4-gross nests),
are just what is wanted, and I am getting repeat orders
doubled. We are all indebted to the Makers,

Messrs. C. H. GLOVER & CO., of Hatcham Sawmills, Ormside St.,
Old Kent Road, LONDON, S.E."!!

WOODEN
BOXES
ALL SIZES
MADE TO ORDER

TO THE WEED KILLER TRADE.

For destroying Weeds, Moss, &c., on Garden Walks, Carriage Drives, Roads, Meadows, &c.

We desire to point out the special advantages which the sale of our "Acme" Weed Killer affords the Trade.

1. The "Acme" Weed Killer is used in the gardens and on the estates of the Gentry everywhere, and by Corporations and Burial Boards in Parks, Cemeteries, &c.

2. Our Retail Prices are such as will induce a ready sale, and we make no charge for 1 and 2 gallon tins.

3. We pay carriage on six 1-gall. tins, or on four 2-gall. tins, and on 10 galls. in drums and upwards, to any Station or Port in Great Britain.

4. Drums are charged at cost price. Full price allowed when returned.

Trade and Export Terms on application. The most Liberal Terms to the Trade.

RETAIL PRICES.—In 1 and 2 gallon tins, 2/- per gallon (tins included); in 5-gallon drums, 1/6 per gallon; 10, 15, and 20 gallons, 1/4 per gallon; in 40-gallon casks, 1/2 per gallon.

TESTIMONIALS received from Mr. HEAD, Crystal Palace; Mr. IRWIN LYNCH, Cambridge Botanic Gardens; and others. THE "ACME" WEED KILLER, FOR CHEAPNESS & EFFICIENCY, HAS WON FOR ITSELF A NAME FAR ABOVE ALL OTHERS.

SOLE PROPRIETORS AND MANUFACTURERS—

THE ACME CHEMICAL CO., LIM., Tunbridge, Kent; & Carlton St., Bolton, Lancashire.

PETROLEUM JELLY

WHITE, RED AND YELLOW
 TRADE MARK
 CONFORMS TO ALL



BEST AND PUREST
 REQUIREMENTS OF B.P.

CHEAPER AND EQUAL TO VASELINE, AND PRONOUNCED BY THE MEDICAL PROFESSION TO BE UNSURPASSED.

Tins of all sizes, from 1 to 10 lbs.; Iron or Wood Kegs, $\frac{1}{2}$, $\frac{1}{4}$, and 1 cwt.; Barrels about 8 cwt., &c. Samples and prices on application, stating packages and quantities required, to the Manufacturers—

SNOWDON, SONS & CO., MILLWALL LONDON, E.

DAY, SON & HEWITT'S

NEVER FAILING HORSE, CATTLE & SHEEP MEDICINES.

THE CHEMICAL EXTRACT.

For Kicks, Cuts, Bruises, Sore Withers, Swellings, Strains of Ligaments and Tendons, Saddle Galls, &c. It rapidly relieves Straining and Painful after Calving and Lambing, and is the remedy for Swollen Udders and Sore Teats.

Price 2s. 6d., 3s. 6d., and 7s. per Bottle.

THE CASEODYNE,

Used as Laudanum for parturition in Mares, Cows, and Ewes, when there is great pain exhibited with feverish symptoms. Highly beneficial for Inflammatory Colic or Enteritis, and for severe forms of Diarrhoea.

Price 3s. 6d. per Large Bottle.

DAY, SON & HEWITT'S

GASEOUS FLUID



THE GREATEST

ANIMAL RESTORATIVE

OF THE AGE.

For Fret, Colic, or Gripes in Horses, Hoven or Bloat in Sheep, and General Debility in Stock; of exceptional value for Colds, Chills, Scour, Diarrhoea, and weakly Lambs and Calves.

Price 1s. 9d. per Bottle, 20s. per doz.

THE RED DRENCH.

For Colds, Indigestion, Costiveness, Yellows, Surfeits, Loss of Cud, Pleurisy, Hide-bound, Red Water, &c. Admirably adapted for cleansing and checking feverish symptoms in Cows and Ewes after a bad time of Calving or Lambing.

Price: for Cows, 13s. per doz.; for Ewes, 3s. 6d. per doz.

THE BRONCHOLINE.

For Husk or Hoose in Heifers, Calves, Sheep, and Lambs, also Tape-worms in Tugs. No parasite can exist in the windpipe or air-passages after the blood has been impregnated with this worm-destroying medicine.

Price 2s. 6d. per Bottle.

THE ORIGINAL
STOCK-BREEDER'S MEDICINE CHESTS,
 For Horses, Cattle, and Sheep. Prices, £1 8s. 9d. and £2 16s. 6d.

THE ORIGINAL
HORSE-KEEPER'S MEDICINE CHESTS,
 For all ailments in Horses. Prices, £1 10s. and £2 17s. 6d.

ROYAL ANIMAL MEDICINE MANUFACTORY, 22 DORSET ST., LONDON, W.

Liberal Discount to Foreign Buyers.

Trade Terms and full particulars on application.

Attractive Show-cards and Handbills sent with each order.

PETROLEUM JELLY.

PARAFFINUM MOLLE, B.P.

(PIONEER BRAND) Registered Trade Mark.

Equal to and Cheaper than **VASELINE**.

FOR MEDICAL AND PHARMACEUTICAL PURPOSES.

White, Yellow, Veterinary, and Waterproof. All kinds put up in 1-lb., 5-lb., 7-lb., 14-lb., 28-lb., and 56-lb. Patent Tins, and in 300-lb. Barrels.

Pure Castor Oil, Cod Liver Oil, White Mineral Oil, Best Eating Olive Oil, Pale and Crude Carbolic Acid, Carbolic Powders, Sheep Dip, Benzine 50 per cent. and 90 per cent., Crude and Rectified Spirits of Tar, Stockholm Tar, Camphor Ice, Carbon Candles.

PATENT

CARBOLIZED PEAT,

THE NEW AND POPULAR DISINFECTING POWDER.

SEND FOR SAMPLES AND PRICES TO

GRINDLEY & CO., Lim., POPLAR, LONDON, E.

(ESTABLISHED 1868.)

BEWARE OF COPYISTS.

**THREE
GREAT**

Established 1840.

**Day & Sons,
Crewe.**

AWARDED OVER 40 PRIZE MEDALS.

**ANIMAL
MEDICINES**

THE "PURIFIED" DRIFFIELD OILS,

Commonly called "Day's Oils,"
"Day's Black Oils."

For Wounds of all kinds in all animals.
For Saddle & Stake Wounds & Cracked Heels.
For Sore Teats and Swollen Udders in Cows.
For Anointing in bad Lambing and Calving.

Price 2s. 6d. and 6s. per Bottle.



BEWARE OF COPYISTS.

THE RED DRINK

OR
COW DRENCH.

Cures Fever and Costiveness in Cattle.
Cleanses and Cools the Blood and System.
For Red Water, Indigestion, and Yellows.
Cures Bad Cleansing & prevents Milk Fever.

Price 12s. per dozen Packets.

The "EWE DRENCH" acts as
above for Sheep. 3s. 6d. per doz.



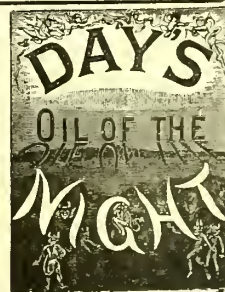
*What's good for
BODILY PAIN?*

DAY'S OIL OF THE NIGHT

The People's Embrocative Balm for Sprains, Muscular Weakness, Rheumatism, Lumbago, Cramp, Sore Throat from Cold, Scalds, &c., and all Aches, Pains, & Soreness.

Send for "Day's Oil of the Night" terms, framed to prevent CUTTING.
Chemists can have a Single Bottle direct. Price 1/1½ & 2/9 per Bot.

DAY & SONS, CREWE, CHESHIRE.



BOSISTO'S "STANDARD TEST" EUCALYPTUS OIL

"PARROT"



BRAND.

Sold only in 1-lb.

and 2-lb. Bottles.

This Oil is the product of Fresh Eucalyptus Foliage obtained from the Desert species, *Dumosa* and *Oleosa*, and yields under proper treatment 35 per cent. water-white crystallisable Eucalyptol, having the specific gravity, 0.920, Temp. 15° Cent., crystallising at 14° Cent., and re-melting at 1° Cent. **BOSISTO'S EUCALYPTUS OIL** received the Silver Medal of the Society of Arts for the introduction into commerce of the Essential Oil of the Eucalyptus from Australia, 1866, and has been awarded at various European, American, and Australian Exhibitions since 1853, 10 Gold Medals, 8 Silver Medals, 18 Bronze Medals.

Quantities less than original packages supplied by Messrs. Allen & Hanburys, Barron, Harvey & Co., A. S. Hill & Sons, Hockin, Wilson & Co., London & Manchester; Hodgkinson, Treacher & Clarke; Grimwade, Ridley & Co., Ipswich. Or in original cases only, containing either 36 1-lb. bottles, or 25 2-lb. bottles, by the Sole Consignees,

GRIMWADE, RIDLEY & CO., 82 BISHOPSGATE ST., LONDON.

S ⁰/₅₆ V ⁰/₆₀ R

PERFECTLY PURE.

FIT FOR ANY PURPOSE.

PURE ORANGE WINE.

NET CASH

WITH ORDER.



S ⁰/₆₁ V ⁰/₆₄ M

AT LOWEST PRICES.

Special Terms to Large Buyers.

PURE GINGER WINE.

FOREIGN WINE AND SPIRIT MERCHANTS.

SOLE PROPRIETORS OF THE FAMOUS "GLENALLAN" PURE MALT WHISKY.

Per doz. 42/- Per doz. THE CREAM OF SCOTCH BLENDS. Per doz. 42/- Per doz.

BOORD & SON,

DISTILLERS, FOREIGN WINE AND SPIRIT MERCHANTS, AND METHYLATORS,
ALLHALLOWS' LANE AND BARTHOLOMEW CLOSE, LONDON, E.C.

Quotations for **S.V.R.** Methylated Spirit and Finish on application.

FINEST ORANGE WINE FOR QUININE.

**JAMES
BURROUGH,**

S ⁵⁶/_{O.P.} V ⁶⁰/_{O.P.} R

CALE ST., CHELSEA, S.W.

and Methylated Spirit

AT LOWEST PRICES.

WRITE FOR QUOTATIONS.

**TASMANIAN
EUCALYPTUS OIL COMPANY.**
TRADE MARK.

Obtained
First Award
and
Gold Medal
—
1891-92.



at the
Tasmanian
Exhibition
—
1891-92.

OIL OF EUCALYPTUS GLOBULUS

From the Native "Blue Gum" Tree of Tasmania.
Pure, fragrant, and of highest medicinal value, as shown by H. Helbing,
F.C.S., and Dr. Passmore.

3d. Samples (2/- per dozen) and in Bottles for Retailing
at 1/-, 2/6, 4/6. Also in 1-lb. Bottles, for Dispensing.

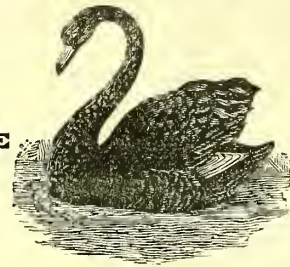
EUCALYPTUS PASTILLES.
HIGH-CLASS
EUCALYPTUS SOAP

OF ALL WHOLESALE HOUSES.

For samples and Helbing's Pharmacological Record, write to the
London Offices—138 Leadenhall St., E.C.
TELEGRAPHIC ADDRESS—"EUCALYPTUS LONDON."

CUMMINGS'

TRADE



MARK.

**CYGNET BRAND
EUCALYPTUS OIL,**

Distilled from the leaves of Eucalyptus CNEORIFOLIA,
formerly considered a sub-variety of *E. Oleosa*, but now classed
as a distinct variety.

The Trade are invited to test this carefully prepared Oil, which since its
recent introduction from Australia has won the unqualified approval of
the leading British, American, and Continental Authorities.

Its purity, pleasant perfume, the unprecedentedly large percentage of
crystallizable Eucalyptol it contains, and other good qualities, are de-
servedly gaining the preference of buyers.

Samples and Quotations on Application.

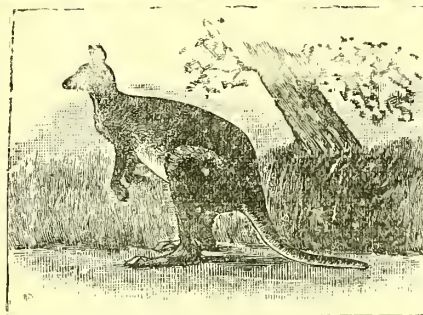
Sole Consignees—Wholesale only—

J. W. DRYSDALE & CO.
8 CREECHURCH LANE, LONDON, E.C.

**BICKFORD'S
EUCALYPTUS OIL**

25-lb. Tins.

KANGAROO



TRADE MARK.

25-lb. Tins.

BRAND.

Is admitted to be the Purest Eucalyptus Oil yet introduced to the public.
To be obtained of your Wholesale Druggist.

SOLE CONSIGNEES—LAUGHLAND, MACKAY & BAKER, 50 Lime St., LONDON.

COLONIAL ADDRESS—A. M. BICKFORD & SONS, WHOLESALE DRUGGISTS, ADELAIDE,
46 CURRIE STREET,

BARCLAY & SONS, LIMITED.



The DRUG TRADE at Home and Abroad are invited to WRITE FOR BARCLAY'S recently published

CATALOGUE OF PATENTS AND SUNDRIES

ALL SUNDRIES, PHOTOGRAPHIC GOODS, &c.,
at Popular Prices!

95 FARRINGTON ST., LONDON, E.C.

Established upwards of a Century.



A FEW FIRST-CLASS SHOW-CASES FOR SALE. WRITE FOR PARTICULARS.

SOLPORT BROS.

Telegrams—
"SOLPORT, LONDON."

66, Shaftesbury Street, LONDON, N.
New North Road,

Manufacturers for Wholesale and Export of
BATH & FLESH GLOVES, STRAPS, PADS, &c.

CHEST PROTECTORS, CORN and BUNION PLASTERS, &c.

LOOFAHS & LOOFAH GOODS.

Buyers and Shippers should write for our full Illustrated Price List.

TRUSSES.



BEST LONDON MAKE.

From all Wholesale Houses or Patentees, but ask for the "EUREKA."

PRICES—

Single Inguinal, quality 1, 11 6
2, 12 6; 3, 15 6 per doz.
Double Inguinal, quality 1, 18 6;
2, 21 6; 3, 24 6

Frees of Scrotal, Femoral, Moc Main, and on the S. & O. Truss
Principle forwarded by return of Post.

Furnaces always afloat. Every spring guaranteed.

Complete maker of BELTS, TRUSSES, SUSPENSORY BANDAGES, ELECTRIC
BELTS AND MAGNETIC APPLIANCES, ELASTIC HOSIERY, ETC.

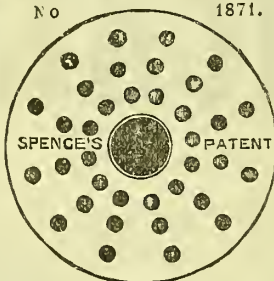
VINCENT WOOD, 3 St. Andrew St., Holborn Circus, LONDON, E.C.

ADJOINING CHURCH. ESTABLISHED 1840

SPENCE'S PATENT SHIELD DEPOT,
44 Camberwell Road, LONDON, S.E.

No 1871.

Spence's
Goods
have the
Largest Sale
in
London.



Agents
Wanted
in
Provinces
and
Abroad.

For full explanation and prices of Shields, Spence's Safe'y
Feeding Bottles and Soothers, fitted with Patent Shield, see
 diary for 1893, page 297, or upon application.

ESCHMANN BROS. & WALSH,

Inventors and Manufacturers of the

SOFT SILK FLEXIBLE CATHETER, GUARANTEED WITH WOVEN EYES

To be had of all Surgical
Instrument Makers
and Wholesale Houses.



To be had of all Surgical
Instrument Makers
and Wholesale Houses.

FOR
POWDERS OR SOLIDS,
LIQUIDS,
RECTAL & VAGINAL PURPOSES
CATTLE MEDICINES,
HORSE AND DOG BALLS.

PLANTEN'S CAPSULES

REVISED PRICE LIST

AND
FREE SAMPLES

Will be forwarded upon application to
C. E. MASON & CO.
2 Beech St., LONDON, E.C.

£100**REWARD**

FREE TRIALS AT OUR CONSULTING ROOMS.



FOR INHALATION ONLY.

WAS RECENTLY OFFERED BY THE

CARBOLIC SMOKE BALL CO.

To any person who contracted Influenza, Coughs, Colds, Catarrh, Asthma, Bronchitis, Sore Throat, Hoarseness, Loss of Voice, Throat Deafness, Croup, Whooping Cough, or any disease caused by taking cold after having used the CARBOLIC SMOKE BALL according to the printed directions.

Many thousand Carbolic Smoke Balls were sold on these advertisements, but only three persons claimed the Reward of £100, thus proving conclusively that this invaluable remedy will prevent and cure the above-mentioned diseases.

One CARBOLIC SMOKE BALL will last a family several months, making it the Cheapest Remedy in the World at the price—
10s. post free.

The CARBOLIC SMOKE BALL will be refilled and returned, post free, the same day, on receipt of Money or Postal Order for 5s.

THE

CARBOLIC SMOKE BALL CO., LD.

NOW OFFER

£200**REWARD**

To the person who purchases a Carbolic Smoke Ball and afterwards contracts any of the following diseases, viz :—
COUGHS, COLD IN THE HEAD, COLD ON THE CHEST, INFLUENZA, CATARRH, ASTHMA, BRONCHITIS, SORE THROAT,
HOARSENESS, THROAT DEAFNESS, LOSS OF VOICE, LARYNGITIS, SNORING, SORE EYES, DIPHTHERIA,
CROUP, WHOOPING COUGH, NEURALGIA, HEADACHE,

Or any disease caused by taking Cold, while using the Carbolic Smoke Ball.

This offer is made subject to conditions to be obtained on application, a duplicate of which must be signed and deposited with the Company in London by the applicant before commencing the treatment specified in the conditions.

This offer will remain open only until 31st March, 1893.

CARBOLIC SMOKE BALL CO., LIMITED.

27 PRINCES STREET, HANOVER SQUARE, LONDON, W.

14 Rue de la Paix, PARIS. 193 Broadway, NEW YORK. 72 Front Street, TORONTO, CANADA.

THE "NO RISK" TRADE.

Special offer to Chemists WHO WILL UNDERTAKE TO SHOW DUMMIES.

WILCOX & CO., 239 Oxford Street, London, will send, carriage paid, 1 dozen CARBOLIC SMOKE BALLS AND DUMMIES upon receipt of REMITTANCE FOR £4 : 7 : 0, and give a written guarantee to RETURN MONEY FOR THOSE UNSOLD 12 months from date of purchase.

GLASS BOTTLES.

TO WHOLESALE AND EXPORT BUYERS.

DISPENSING BOTTLES of best quality, in White Flint or all the best and newest tints. **VIALS**.—White Flint or Coloured, in all shapes and sizes. **FEEDING BOTTLES**.—Plain mouths or Screw Steppers, in White or Green Flint. **LIME CREAMS AND KALIS** of all sizes. **ESSENCE BOTTLES** of every description, Plain or Stopped. **MALT EXTRACT BOTTLES**, in Actinio Green, Amber, Dark Blue, or White Flint.

TO FOREIGN AND COLONIAL BUYERS.

Having recently erected spacious Warehouses we are enabled to give special attention to packing Goods for Export. Only experienced Packers employed.

E. A. HEARN & CO., WHOLESALE & EXPORT GLASS BOTTLE MANUFACTURERS, LONDON, E.
ECLIPSE GLASS WORKS, CHATSWORTH ROAD, CLAPTON, LONDON, E.

BOTTLES

Write for revised Price List of Dispensing Bottles, &c.

SAMPLES ON APPLICATION.

Special Quotations for Large Quantities.

E. YOULDON,
EAST LONDON GLASS BOTTLE WAREHOUSE.
36, 38, & 40 Great Garden Street,
WHITECHAPEL, LONDON, E.



R. H. BARRETT,

Flint Glass Bottle Works,
THE OVAL, CAMBRIDGE HEATH, LONDON, E.
THE HEART SCENT BOTTLE (Reg.), for Salts or Perfume.

Is most admirably adapted for pocket use, combining great beauty of design with the maximum of convenience.
Price, Plain or Fluted (in 5 GROSS lots):—12/6 per gross. Assorted WHITE and COLOURED.
N.B.—The Caps for these will be fitted, if desired, with indestructible washers, to resist the action of ammonia, which destroys cork in a short time.

METAL SCREW-CAPPED LIMES, in White Flint, Actinio Green, or Amber.
The Best Bottle for Glycerine or Pills. Prices: 1 oz. 13/6, 2 oz. 15/—, 3 oz. 18/—, &c. per gross.

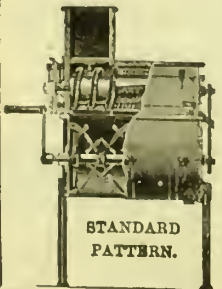
Chemists' and Perfumers' Bottles in great variety, Plain or Stopped.

Orders may be sent to the PRINCIPAL WHOLESALE HOUSES.

TELEGRAPHIC ADDRESS—"FOURPOINT LONDON."

[3]

Use GARDNER'S Patent
'RAPID' SIFTERS & MIXERS
For Sifting and Blending every kind of Dry Powders.



STANDARD PATTERN.

New Illustrated Catalogue on application to
WM. GARDNER,
Engineer, &c., Gloucester.

GLASS BOTTLES

From Stock in London or direct from the Works.

GOOD AND CHEAP.

SPECIAL PACKAGE for the New Year, 1893, containing—

	s.	d.
1 GROSS 8-OZ. BOTTLES	9	0
2 " 6-OZ. "	18	0
1 " 4-OZ. "	8	0
PACKAGE	1	0
	£1	16 0

The New Shape with rounded edges, or the ordinary shape, either plain or graduated.

The above "Special Package" is sent, Carriage Free, to any part of England.

A SAMPLE BOTTLE SENT FREE ON APPLICATION.

I. ISAACS & CO. Glass Bottle Manufacturers
25 Francis St., Tottenham Court Rd., LONDON, W.C.
Established 50 Years. Bankers London and Westminster Bank.

FEEDING BOTTLES

IN GREAT VARIETY,

AT MANUFACTURERS' WORKS PRICES

ALL BOTTLE BUYERS SHOULD SEND FOR OUR NEW

Illustrated Price List

EVERY CLASS AND DESCRIPTION

BOTTLES AND GLASSWARE

WRITE FOR OUR SAMPLE CARD NEW

MINIATURE * PERFUMERY * BOTTLES

NOVEL AND ATTRACTIVE ADVERTISEMENT.

BREFFIT'S

(LIMITED),

83 UPPER THAMES STREET, LONDON.

 Chemists' & Druggists' Bottle & Glassware Makers.

CARD SPACES.

FOR TERMS APPLY TO THE PUBLISHER.

THE
"MORSTADT" **Cachets**

Are the most digestible, flexible, and elegant Cachets in the market, and are fast replacing all competitors. The Cachets are made to hold from 3 to 184 grains Quinine or Salicylic Acid.

"MORSTADT" CACHET CLOSING APPARATUS, to easily, cleanly and speedily close 12 Cachets at one operation, from 12s. to 30s.

FILL APPARATUS, to fill and close 1 Cachet at a time, 2s. 6d. each.

THOMAS CHRISTY & CO., 25 Lime St., London, E.C.

E. H. THIELLAY'S (Registered 1867)
MOUSQUETAIRE

A bright Fixing Liquid for the special training of the Moustache. Invaluable to Medical Men, repelling infectious miasma from the respiration. In Cases, with Brush, Pom., H. negroise, &c. at 2s., 3s. 6s., 7s. 6s., &c.

Most successful remedy, 2s. sample not free 15 stamps.

All Wholesale Houses, or direct from

E. H. THIELLAY
Parfumeur-Chimiste, Amersham Park, N.W. Cross, LONDON.
SHOW ROOMS AT CHARING CROSS HOTEL. (1)

MUMFORD'S
CONCENTRATED CORDIAL ESSENCE
OF JAMAICA GINGER.

For 20 years has not been equalled for its prompt action in relieving pain from Gout, Indigestion, Nervousness, Hysteria, Flatulency, &c. in bottles, 2s. 9d., 4s. 6s., obtainable through Sanger, Barclay, Edwards, &c., or from the

SOLE PROPRIETOR,
5 BATHURST STREET, HYDE PARK, LONDON, ENGLAND.

Fletcher's
Hydrobromates

Supplied in Original Bottles ready for Patient's use (stamped), to retail at 4/6 each; also in 1-lb. Bottles for Dispensing, by the Sole Manufacturers:-

Fletcher, Fletcher & Stevenson,
21 Mincing Lane,
London, E.C.

"SILVERY WHITE GUTTA PERCHA ENAMEL"
TRADE MARK.
TOOTH STOPPING

P. A. STEVENS, Surgeon-Dentist,
72 MANFIELD ROAD, N.W.,
SOLE PROPRIETOR AND MANUFACTURER.

Registered - No. 5440.

Special Terms to Wholesale Houses for Sheet or Sticks stamped with their own name & a sample box of 3d. sticks sent post free for 12 stamps. Pricelist and sample free.

PUREST CHLOROFORM

Guaranteed free from all injurious impurities. The Purest in the World.

SEND FOR ANALYSIS AND TESTIMONIALS.

SALAMON & CO., LD., CHEMICAL MANUFACTURERS,
RAINFHAM, ESSEX.

HAND-PICKED GUM ARABIC.

Wholesale and Export Druggists before buying elsewhere should apply to

FREDK. FINK & CO.
10 & 11 MINCING LANE, LONDON, E.C. [2]

PRECIPITATED CHALK, WHITEST AND PUREST.

CHEAPEST SELLERS IN THE MARKET.

ALSO CHEMICALS, DRUGS, AND OILS.

APPLY TO
AUG. LEVERMORE & CO., 8 LIME STREET, LONDON, E.C.

Bromley's Gout & Rheumatic Pills

Established 1807. WILL CURE. CHEAPEST. MOST PROFITABLE. Not Sold under Price on Box. Send Hand-bill or Labels.

FREE Printing of Chemists' own Bills.

48 Sir Thomas's Buildings Liverpool, Eng.

EADE'S
GOUT and RHEUMATIC PILLS

Are the safest and most effectual remedy advertised for

GOUT, RHEUMATISM, AND ALL MUSCULAR PAINS.

GEORGE EADE, 72 GOSWELL RD., E.C.

Counter Bills and Show Cards on application.

RAYBOULD'S FURNITURE POLISH

BRIGHTENS FURNITURE WITH LITTLE LABOUR.

In Tins—1d., 7/- gross. Stone Bottles—1d., 8/- gross; 3d., 2/- dozen; 5d., 4/- dozen; 1s., 7/- dozen. It is sure to please and increase your trade. Every Chemist should send for Sample order, 6 dozen assorted as required, Carriage Paid, P.O.O. or Cheque, payable to

FLESHER RAYBOULD, REFORM WORKS, DUDLEY.

LABELS AND SHOW CARDS.

Medical Slip Labels Lithographed, from 10d. per 1,000.

Reversible Labels (e.g. White Letters, Coloured Ground), from 1s. per 1,000.

SHOW CARDS, 12x10, Lithographed, Varnished, and Taped, from 15s. per 100. Saline Wrappers, with Name and Address, from 7/6 per 100.

SPELLER & CO., 13 GANDY ST., EXETER, ENGLAND.

BLAUD'S PILLS (Best Quality, Soluble Coating).

10-gross Tins, carriage paid, for 4 6s. Cash with order.

7-lb Tins (56 gross), carriage paid, for 21/- Cash with order.

COMP. SULPH. LOZ. (Garrod's Formula) & TABLETS.

4 lbs., carriage paid, for 4/- Cash with order.

7 lbs., carriage paid, for 6/6 Cash with order.

SPECIAL QUOTATIONS FOR LARGE QUANTITIES.

JAMES N. DAVIDSON & GRAY, CHEMISTS, DUNDEE.

PRINTING! FOR LONG NUMBERS OF PAMPHLETS, BILLS, &c.

Send for Estimates from

ECONOMIC PRINTING & PUBLISHING COMPANY, Ltd.,
30, BOUVERIE STREET, FLEET STREET, E.C.

NEW CROP FIRST EXTRACT
LEMON OIL,

Absolutely pure. Nothing finer imported.
6/8 per lb. a.l.f. Hull, London, or Liverpool, delivered as required up to December, 1893. Special quotations for quantities.

MARK LEWIS, 23 Old Corn Exchange, MANCHESTER, and
in LIVERPOOL and LONDON.
DIRECT AGENT FOR LARGEST CONTINENTAL HOUSES.

WHITE, FAIRCHILD & CO.
30 GREAT TOWER STREET, E.C.
ESTABLISHED 1847.

SPECIALITY.—The "Original Canister" and Roasted Coffees.
These Coffees have been before the Public for nearly 50 years,
and are the very best of their kind.

GUM ARABIC

AND DRUG MERCHANTS.

VAN DER LELY & SIMPSON,
3 New London Street, LONDON.

TO LET.

"ANGLO-NORWEGIAN"
COD-LIVER OIL.

SEASON 1893.

This Cod-Liver Oil is pure, stands the cold without solidifying, and is quite sweet, with an agreeable odour of the fresh liver. It is the **FINEST** oil, with the least possible colour, taste, or smell.

An assortment of artistic Labels, with
Chemist's Name and Address.

EVANS, LESCHER & WEBB,

60 BARTHOLOMEW CLOSE, LONDON.

3/6
per doz. ^{1s. Size}

WATSON & WATES'
HOMŒOPATHICS

NO CHARGE FOR SHOW CASES.

93 LEADENHALL STREET,
LONDON, E.C.

Export and Wholesale.

THE WANT OF THE DAY!

NO MORE SOFT LINEN WHEN STARCHED.

Used in the Royal Laundries.

Should be used in Every House.

The Greatest Boon ever offered to the Laundress for imparting an **IVORY-FINISH** to Starched Linen, Lace, &c. It does not stick to spider-web-like materials.



REGISTERED No. 40,376.

Once Tried, Always Wanted.

Makes Old Linen like New.

From the Chief Laundress to H.R.H. the Prince of Wales:—West Newton, near Lynn, Norfolk, Aug. 29, 1879. "Sir,—Having tried your "STARCH GLOSS," I certainly think it a great improvement—far superior to any I have tried.
Yours truly,
To Mr. CRITCHLEY. E. ELDER.

Sold by Chemists and Druggists, Grocers, Oilmen, &c., in Packets at 1d., 3d., 6d., and 1s. each.

PREPARED ONLY BY
T. CRITCHLEY, CHEMIST AND WHOLESALE DRUGGIST, BLACKBURN.
LONDON DEPOT—2 BEECH STREET, E.C.

SHIRLEY'S**A1****MENTHOL****CONES.**

	gross.	No.
1d. Vase or Pedestal. 3 doz. on card ...	7/-	8P. 6d. Acorn, Boxwood
1d. Bottle ...	6/6	112. 6d. Draughtsman, "
2d. Pedestal ...	14/-	40. 6d. Watch, "
		14N. 6d. Large Pedestal ..
3d. " 1 doz. on card	1 10	117. 6d. Monster, Varnished Wood ...
4d. " "	2/6	112G. 6d. Globe-shape, Boxwood ...
		113P. 6d. Printed Skittle, Boxwood ...
		113R. 6d. Reversible Screw

doz.	No.	doz.
3/3	111. 1s. Acorn ...	5/-
3/3	17F. 1s. Draughtsman ...	5/6
3/6	9CR. 1s. Reversible ...	4/6
3/6	14L. 1s. Printed Acorn ...	6/3

The best 6d. is the Unbreakable
A1 Roller Menthol.
3/6 doz. carded.

There is no nonsense about this.
You can throw it up to the ceiling
and it will not break in falling.

"JUSTICE" figure given away with £2 order.

This helps to make your window attractive.

A 1 SOOTHERS.

The Best 3d. in the World.

A1 SLIDE RING.

Very strong. Fitted with Seamless Teat.
2/- dozen.

	gross.	doz.
1d., 3 dozen on card, with cord for neck ...	7/6	6d., Bone Ring and Mount ...
1d., 3 dozen on card, Bone Ring ...	8/6	6d., Whistle ...
2d., Boxwood Mount, and cord ...	14/-	6d., Fascinators ...
2d., Bone Mount, and Silk ...	15/-	6d., Baby Companions ...
3d., All Rubber ...	17/-	
3d., Bone Ring and Mount ...	1/10	

	doz.
6d., Bone Ring and Mount ...	3/6
6d., Whistle ...	3/9
6d., Fascinators ...	3/9
6d., Baby Companions ...	3/9

Be on the look out for a novelty shortly.

MISSING

Neither Shipper, Wholesaler, nor Retail Chemist can * * * * to do without **SHIRLEY BROTHERS.**

WORDS!

When buying any lines connected with Chemists' goods (patent medicines excepted), drop a letter to Shirley's for quotations, otherwise you will be "—— WISE and —— foolish."

FLAVOURING ESSENCES,	1d. Tubes. 3 doz. on a card ...	7/6 gross.
"	3d. Bottles. 1 doz. on new show-stand, best line in the market ...	1/10 doz.

ETIENNE'S

In Bulk, Triple. 9-

PERFUMES.

	doz.	doz.
1b. in Original Tins. 6d., Cut Fancy ...	4/-	1s. Lundborg shape ...
6d., Sprinkler ...	3/9	2 oz. " " ...
10 - per lb. in 1/4, 3/4, 6d., Capped ...	3/6	4 oz. " " ...
or 1 lb. bottles. 6d., Plain Cut ...	4/-	1s. Heavy Essence, cut stopper ...

VERY HIGHLY CONCENTRATED, 1 oz., 11/-; 2 oz., 18/-; 4 oz., 34/-; 6d. Lavender, 3/6 dozen.
1s. sizes and upwards can be had with buyer's name on free by ordering 3 dozen.

CARDED**SCENTS.**

1d. Tubes ... gross 7/6	3d. Ovals and Sprinklers, doz. 2/-	3d. Lavender and Musk, doz. 2/-
1d. Bottles ... 8/-	3d. Capped ... 1/10	1d. Eau de Cologne ... gross 8/-
2d. " ... 14/-	1d. Lavender and Musk, gross 8/-	3d. " " ... doz. 1/10

"HAWARDEN" & "PRIMROSE" BOUQUETS.

Charming Lines, labelled in 3 colours, bearing Gladstone's and Beaconsfield's Portraits, 3d., 1 doz. on card, 2/- doz.; 6d., 3/9 doz.; 1/-, 8/- doz.

PLEASE carefully look at the following, as they are lines you should stock!!!!

GOLD PAINT.

WATERPROOF.

1d., 3 doz. on card, 7/- gross.
3d., 1 " " 1/10 doz.

ROSEMARY AND BORAX**HAIR-WASH POWDER**

1d., wrapped in tinfoil enclosed in envelopes.
3 doz. on card, 7/- gross.

DIGESTIVE CANDY.

In Tins to retail at 2d.

1 doz. on card, 1/3 doz.

CORN SOLVENT.

In Bottles with Brush attached to box-top cork.

1 doz on card, 2/6 doz.

CEMENT.

1d., 3 doz. on card, 7/- gross.

3d., 1 " " 1/10 doz.

SACHETS.

3d., very pretty, in hanging glass box, 2/- doz.

6d., half-doz. in box, 4/- doz.

These are beautifully made and scented.

BRILLANTINE

Well got up and equal to anything in the market.

1/2 oz., capped, 2/9 doz.; with Sprinkler, 3/- doz.

1 oz., capped, 3/9 doz.; with Sprinkler, 4/3 doz.

GLYCERINE, CUCUMBER

AND ALMONDS. 2d.

1 doz. on card, 1/3 doz.

In bulk, 1/-lb.; 5 lbs. 10d. lb. Bottles free.

CARBOLIC TOOTH POWDER.

In Tins, very attractively labelled.

3/4 oz.	1 oz.	1 1/4 oz.	3 oz.
2 2	3 -	3 6	5/- per doz.
6 doz.	1 11	2 9	3 3
12 ..	1 9	2 6	3 -

Please send name on free for gross lots.

BOUQUET LOZENGES.

Violet, Musk, Heliotrope, Rose, and Lavender. Heart and Diamond shapes.

2/3 per lb. in bulk. In chromo labelled gold tins 2/3 doz., 2 doz. in box. In glass-topped tins 2/9 doz.

FULLER'S EARTH AND VIOLET POWDER.

In handsome gold-blocked leatherette boxes, quite new ... 3/9 doz.

A beautiful line.

1d. barrels, F.E., 6/-; V.P., 6/6 gross.

SHIRLEY BROTHERS, 105 Whitecross Street, LONDON, E.C.

43 Highest Awards over all Competitors throughout the World.

SEABURY & JOHNSON,

ORIGINAL MANUFACTURERS OF

PHARMACOPŒIAL AND SURGICAL PLASTERS

IN RUBBER COMBINATION,

ANTISEPTIC DRESSINGS AND ABSORBENTS, &c.

Manufacturers of **PLASTERS** of every Description.

Adhesive, Breast, Bunion, Corn, Court, Dental, Dermatological, Homœopathic, Isinglass, Kid, Medicinal, Mustard, Pharmacopœial and Surgical, &c. *In Rubber Combination, plain or porous, and spread on any material required.*

Manufacturers of **ABSORBENT BANDAGES, COTTONS, GAUZES, LINT, WOOLS** of every description. Antiseptic, Plain and Medicated, Benzoated, Borated, Carbolated, Cocaine, Corrosive Sublimate, Eucalyptol, Hydronaphthol, Iodized, Iodoform, Morphia, Naphthaline, Salicylated, Styptic, Tannin, Thymol, &c.

In all our preparations the percentage of medication is based upon the weight of the finished product.

Manufacturers of **OILED SILK, MEAD'S DRESSING PAPER,**

OILED MUSLIN, OILED PAPER, &c., for Hospital Purposes.

Antiseptic Pellets.

Corrosive Sublimate, in bottles, 9/, 16/, 30/doz. pots.

Adhesive Strips.

DR. PENNY'S Adjustable (12 in a box), 24/ per doz.

Ear Blisters.

Right or Left, 2/ per doz.

Darby's Dental Capsicum Plasters.

(In boxes of 80 Plasters, 38/ per dozen.)

Court Plasters, in 50 Varieties, from 40/ dozen to 4/ gross.

Mead's Rubber Adhesive Plaster.

In 5-yard rolls, 12 inches wide, 5/ each. In 1-yard rolls, 7 inches wide, 14/ per dozen.

10-YARD SPOOLS—	{	Width		1		2		3 inches.	
		12/	14/	16/	20/	24/	28/	32/	per dozen.
5 " "	"	9/	10/	12/	15/	18/	21/	24/	"

S. & J. Surgeon's Rubber Adhesive Plaster

Has almost entirely supplanted the old form of Adhesive, by reason of its superiority in all essential qualities. **PLAIN** or **POROUS**.

In 5-yard rolls, 7 inches wide, 6/6 each. In 1-yard rolls, 7 inches wide, 17/ per dozen.

10-YARD SPOOLS—	{	Width		1		2		3 inches	
		18/	24/	30/	40/	50/	60/	per dozen.	

Belladonna Plasters—Porous and Plain, 5 × 7½ inches, 54/ per gross; 7 × 12 inches, 10/ per dozen.

1-yard rolls, 7 inches wide, 27/6 per doz. 5-yard rolls, 5 inches wide, 102/; 7 inches wide, 126/ per doz.
" " on red felt, 38/ per doz. 5 × 7½ inches, 8/ per doz. 7 × 12 inches, 12/ per doz. On swansdown, 38/ per doz. yards.

Belladonna Breast Plasters, 6 inches, 4/6; 7 inches, 6/; 8 inches, 7/6 per dozen.

Kid Plasters, long shapt, 5/, 6/, and 7/ per dozen.

Camphorated Blister Plaster, 27/6 per dozen yards.

Strengthening Plasters—Porous, 5 × 7½ inches, 30/ per gross; 7 × 12 inches, 72/ per gross.

1-yard rolls, 5 inches wide, 14/; 7 inches wide, 27/6 dozen yards. 5-yard rolls, 5 inches wide, 80/; 7 inches wide, 98/ per dozen.
On red felt, " 5 × 7½ inches, 38/ gross; 7 × 12 inches, 12/6.
" " 5 × 7½ inches, 60/ gross; 7 × 12 inches, 144/ gross.

SUBJECT TO DISCOUNT.

PRICE LIST ON APPLICATION.

Supplies may be obtained through any of the Wholesale Houses by ordering **SEABURY'S**.

SEABURY & JOHNSON,

Manufacturing Chemists,

SEABURY BUILDINGS,

NEW YORK.

EUROPEAN DEPOT — 32 & 33 SNOW HILL, LONDON, E.C.

BEWARE OF SPURIOUS IMITATIONS.

ORIGINALITY AND RELIABILITY.

QUALITY IS OF FIRST IMPORTANCE.

TELEGRAPHIC ADDRESS—
"BAISS BROTHERS LONDON."

ESTABLISHED 1833.

TELEPHONE
No. 4369.

BAISS BROTHERS & CO.

WHOLESALE & EXPORT DRUGGISTS
AND
MANUFACTURING CHEMISTS.

MAKERS OF

CONCENTRATED LIQUORS

SOLID AND LIQUID EXTRACTS, B.P. & U.S.P.,

And all Pharmaceutical Preparations.

OL. LAVAND. "Special."

PETROLATUM

(Paraffinum Molle, P.B.).



PERFUMES. "Special."

SYR. HYPOPHOSPH. CO.

(Neutral and Bright).

Finest Non-Freezing Norwegian Cod-liver Oil (1892). Tasteless Castor Oil. English and Foreign Essential Oils. Extract of Malt and Extract of Malt and Cod-liver Oil. In 8-oz. and 16-oz. Amber Bottles with Artistic Labels.

EUCALYPTUS OIL. "VIRGINIAN" SALAD OIL.

SPECIAL QUOTATIONS TO LARGE BUYERS.

JEWRY STREET, LONDON, E.C.

And NEW BROWN STREET MANCHESTER.

"THE QUARTERLY THERAPEUTIC REVIEW,"

A record of all the published NEW REMEDIES, is published by us in January, April, July, and October.
A Free Copy Mailed, with Prices Current, on Receipt of Business Card.